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Original Department.

Chionanthus, as a True Cholagogue.

By J. M. Blackerby, M. D., Milford, Ky.

In the treatment of hepatic affections many agents are and have been recommended by the profession, some of more and some of less general utility, according to the stage and conditions of the disease, and the preference given them by the practitioner. For all the conditions of liver disease, each case taken separately and individually, the materia medica scarcely furnishes a more certain and reliable remedy than the chionanthus. There are certainly other cholagogues deserving the name, as, for instance, phosphate of soda, podophyllin, irisin, leptandrin, euonymin, etc., but in my experience, and in my hands, chionanthus has proven itself the cholagogue, par excellence. I am not aware that it is owing to any particular or unusual skill on my part as to manner or mode of its use, nor to the selection of cases, for, as in the use of other cholagogue remedies, I have administered the drug as in my judgment the symptoms and conditions required simply a cholagogue action. There may be, and I think there are certain conditions demanding the use of this drug, as I believe we will find to be the case in all well-studied conditions of any disease whatever. The drug, however, being comparatively a new agent in the treatment of hepatic disorders has not as yet received that special study necessary to define its exact place in the treatment of the many forms of hepatic affections. No less, however, can be said of this drug and its cholagogue action than of any of the older remedies usually recommended in the treatment of diseases of the liver.

While I desire not to be understood as writing against any of the drugs heretofore classed among the true cholagogues, yet there are among them some that scarcely deserve the appellation, notably calomel, the old and trusted friend of our fathers; a drug whose praises have been sung by many of the ablest men in the profession from its earliest infancy. But is it really a true cholagogue? While

I concede it a place in the materia medica as an agent of undoubted value when certain specific actions are necessary, and a clear understanding of the case in hand is had, and the specific or special action of the medicine is known, I must still deny it any of the properties of a true cholagogue, or at least if it possesses them I am so unfortunate, or have studied the drug to so little advantage as not to be able to recognize the influence, claimed for it by its many admirers, over the hepatic gland. Having tested the drug in numerous cases of enlarged liver, indurated liver, and the other forms of hepatic disease, I must say that, uncombined with other drugs, it has invariably proved untrustworthy in my hands as a cholagogue; though frequently entailing on the patient sequela, very much to be dreaded and very difficult to be gotten rid of. Combined with some of the true cholagogues it seems to the casual observer and admirer to produce the happiest effect, an effect which, if properly studied, might unveil to the inquiring mind the exact cause of the action produced, the result obtained. While it may, and does change the secretions in its passage through the system, I deny that it does so by any specific cholagogue action on the hepatic gland in and of itself; and I greatly doubt if it adds any virtue to such remedies as are truly cholagogue in their tendencies. If so, my experience has not proven the fact, though I formerly used it in combination with some one or more of them, believing then, that a union of the properties of several drugs served to enhance the therapeutical value of the potion.

In proving a drug, I uniformly use it alone, and this I have repeatedly done with chionanthus, though in many instances I combine it with, or alternate it with some other drug, but not with a view to strengthening its cholagogue action, but to obtain another and different action on the system. For instance, given a case of great hepatic torpor complicated with serious constipation, then I am in the habit of adding cascara or alternating it with chionanthus, or I sometimes use nux vomica in combination if there is great torpor of the large bowels, or hyoscyamus if pain is present; or if there be excessive diarrhœa, I add opium or some agent to control the inordinate action of the bowels; yet it is plain I rely in all these complications simply on the chionanthus to do the work assigned it in controling or correcting the hepatic disease. In the difficult and stubborn diseases of the liver so common in this day among old and inveterate drinkers of alcoholic stimulants—"the old topers"—I find chionanthus the one safe and reliable remedy for that condition common to this class of people, enlarged and indurated liver of a chronic nature; or in the earlier stage of the disease, an inflamed and tender liver. In either of these conditions I rely with that degree of certainty I have in no other one remedy, on the fringe tree, and feel perfectly satisfied of success with it as my sheet anchor, if there are no complications, or if the disease is yet amenable to treatment.

In the year 1879 I was solicited by a gentleman to examine his case and ascertain his condition, and if I thought it advisable, to treat him as in my judgment I thought best. I asked him to visit my office at an early hour for that purpose, and he did so. I take from my note book the following memorandum: S. E. W., æt. 67, hotel-keeper for the past nine years, nervo-bilious temperament, and at an earlier period suffered greatly from dyspepsia, though says he has not been troubled with it for fourteen years; has used alcoholic drinks nearly all his life, but not given to drunkenness until he commenced keeping tavern, nine years ago, since which time he has been a regular and constant drinker. On examination of patient I find the liver greatly enlarged and descending below the ribs to near the pelvic rim, and by measuring with the tape measure, the right side is found to measure 3¾ inches greater than the left over the inferior margin of the ribs; great hardness and tenderness of liver, so much so that patient cannot wear the right suspender nor the upper buttons of his pants closed. Complexion very bad and breath very disagreeable; bowels irregular and constipated most of the time, moved occasionally with large doses of calomel and rhubarb, or sulphate of magnesia and castor oil. Having been in the hands of his family physician for several years this was his only treatment. His urine was constantly high-colored and difficult to void and very offensive; appetite very poor, frequently taking not more than one spare meal in the 24 hours; cannot raise himself up a step or two to enter a door without supporting himself by the sides of the door-frame or some other means; sleeps but little and that indifferently, and is nervous and restless, and says he feels that a few weeks at most will terminate his career on earth. This old man was a pitiable-looking object indeed, and when he approached me for counsel and advice, crying as he was from long suffering, I felt the great responsibility resting on the medical adviser and the intense desire to possess some drug which I might offer to the old man and tell him truly I had a panacea for his ills. I told him I could not promise a certain cure, but would do the best in my power and with the means in my hands.

Wishing to thoroughly test the cholagogue properties of chionanthus in this case, believing it in every way an appropriate one, I advised the old gentleman of my desires, telling him if I discovered that the remedy seemed to fail in the indications I expected, I should use such other remedies as seemed necessary or the case demanded, and to which he at once agreed. Accordingly I prescribed for him: ℞ Ext. chionanthus fluidi, ʒ ij. Take a teaspoonful in water or syrup three times daily, the last on retiring at night. When the medicine is out report to me. At the expiration of the time patient said the medicine acted rather freely and he had to reduce the doses to one-half teaspoonful three times and sometimes only twice a day. I saw no material change in patient at this visit, and renewed the prescription, adding tr. nux vomica as a tonic to the bowels. On his third visit he expressed himself as much improved, and on measuring the chest at this visit I find the enlargement reduced to two inches and a half, the tenderness very greatly diminished and the general appearance of patient much improved. The appetite is so much improved as to make it necessary to restrict both the amount and quality of his diet. Continued the chionanthus alternated with nux

vomica for six weeks more, and dismissed my patient cured, to the astonishment of many friends and neighbors, and the result being quite gratifying to myself. The treatment and success in this case largely increased my former confidence in the drug, and I have sought every available and suitable opportunity to more thoroughly prove the value of the drug as a cholagogue.

My second case for reference is that of Mr. J. W. T., a farmer of rather irregular habits, but not a confirmed drunkard. This patient had been drinking pretty hard for several months of mixed liquors and beverages. In September of 1880 he was attacked with severe pain in the right side and on examination I found him suffering from acute inflammation of the liver with great tenderness and enlargement. In this case I of course made applications of warm fomentations to the region of liver and exhibited only the chionanthus as a cholagogue. In addition, I gave such sedative and tonic remedies as the case seemed to demand. I continued this course until I had the pleasure of seeing my patient restored to perfect health.

The third case I select from my note book, and of more recent date is that of J. B. B., æt. 32. Sanguine bilious temperament, an habitual and hard drinker for eight or ten years, and unmindful of the kind of spirits he used, drinking pure and impure whisky, brandy, ale and beer, as he happened to get them. This man was attacked with pain of a severe character, sharp and lancinating, in the right side, and on examination I found the liver greatly enlarged and remarkably tender. I placed him on a sedative treatment for the febrile disturbance, fomentations to the side, and gave extract chionanthus fluidum. Next morning patient seemed better, rested easy, fever much abated and seemed doing well. That evening an experienced physician visited our town and the patient and friends feeling much anxiety asked to have him called in consultation. He at once advised the discontinuance of the chionanthus, and promptly insisted on one grain doses of calomel with pulv. opii every 3 or 4 hours, till the specific effect of the mercury was produced. I opposed this course and asked to be relieved from the case. This course of treatment, with a liberal allowance of whisky punch was kept up for seven or eight days when another physician was called. He insisted on my return to the case, and after a consultation we omitted the calomel, and whisky, and restored the chionanthus, and such sedative treatment as seemed demanded in the present state of the case. About this time an irritation of the stomach presented itself, of seemingly scirrhous nature, and very hard to control. Various remedies were resorted to for this purpose, with little hope of success. The chionanthus was persistently used, but with caution, and produced the happiest effect, completely reducing the abnormal size of the gland and relieving it of the pain consequent to the inflammation attending it. The trouble in the stomach, however, increased as the hepatic condition yielded to treatment, and in two months from date of attack the patient died of scirrhous stomach, of which disease his mother had died only two years previously. Thus ended a case, which though not cured, certainly speaks as much in favor of chionanthus as any case, successful or otherwise, that I have used it in. Had it not been for the, as I think, injudicious use of the mercury and whisky urged by the first counsel, I thought then, and still think the patient would have recovered, at least, part of his usual health. True, I cannot prove my position, but the fact is that the stomach showed none of the scirrhous symptoms until about the seventh day from the initiatory use of those agents. Again, when I returned to the case, these symptoms had just made their appearance, and the tenderness in the liver was increasing, as the patient himself stated; but on resuming the chionanthus an amelioration of the pain and tenderness was soon observed, and Dr. H——, my assistant and last counsel in the case, expressed great surprise and satisfaction at the action of the remedy. He said to me, "that it was to him an entirely new drug of which he had neither seen nor heard, but it certainly possessed very wonderful cholagogue properties." I have met with no more satisfactory agents in the practice than chionanthus for such conditions as it seems peculiarly adapted to, and to my mind they are all such as present hepatic torpidity and congestion or enlargement and tenderness. I have not studied it with regard to any special influence it may have on the kidneys or spleen, but hope to do so in the future.

"What is Wrong with our Emmenagogues?"

By W. R. D. Blackwood, M. D.,* Philadelphia, Pa.

THERE is nothing wrong with our emmenagogue. I employ the singular number, for, singular as it may appear, we have a single emmenagogue only—ELECTRICITY.

It has become a fashion in medicine to hand down as heirlooms a number of remedies classed as diuretics, alteratives, sudorifics and emmenagogues from father to son, both traditionally and through our medical books, and all these drugs, simple and compound, are prescribed largely by hundreds of physicians on faith. How they fail to see that no effect is produced by them, or how they attribute subsequent results to them when a little study would show that nature, which cures many cases without medicine (*vide* homœopathy), has simply reached the point at which relief is had if the patient is let alone, or that the desired result is attained through switching the offending function to another track where a kindly disposed organ does the work vicariously with more or less success, the disordered viscera meantime resting and recuperating, is beyond my ability to understand. Beginners always prescribe by rule or

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NOTE.—Those specially interested in this and analogous subjects may see other papers by the writer:

Medical and Surgical Reporter, July 31, 1880.
Medical Bulletin, January, 1881.
Medical and Surgical Reporter, March 12, 1881.
Medical Bulletin, April, 1881.
American Journal of Obstetrics, April, 1881.
Philadelphia Medical Times, October 22, 1881.
Philadelphia Medical Times, November 19, 1881.
Medical Bulletin, October, 1882.

rote—they treat symptoms only, but as years roll on they learn by experience, and analyze their cases, thereby finding that many diverse symptoms are the outcome of a single cause, and thus simplify, by a good knowledge of pathology, their therapeutics. It is to be feared that, judging by contributions in many of the poorer class of medical journals, a goodly number of superficially educated physicians do not learn this much, but they get into a rut and treat every recurring case just as they did a preceding one of similar kind, and although this plan is an easy one for the doctor, it is bad for the patient and bad for the credit of the profession at large. Thousands of cases easily curable at the outset, become chronic by such mechanical treatment, and thereby unnecessary time, suffering, trouble and money is lost, all of which could be saved by critical diagnosis and intelligent application of therapeutic measures—each case being isolated, a study in itself. To my mind the lax application of the term "emmenagogue" to the list of drugs and others indicated in the very readable and timely article of Dr. Miller in the THERAPEUTIC GAZETTE for September, is due to some such causes as I have above noted. Not one of the drugs enumerated by Dr. Miller is strictly an emmenagogue. Each of them has over and over again been experimentally given to both human and brute cases, virgin and married, sterile and pregnant, and without decided results, such as scientific deductions demand. I have, by a series of carefully conducted investigations (in which to avoid possible error I was assisted by professional friends), satisfied myself of the truth of the statement made at the beginning of this paper—which is, that not a single article of the vegetable or mineral materia medica is *per se* an emmenagogue. Occasionally spamenorrhœa might improve under a roborant treatment, but it was simply because of generally heightened health, hygienic measures being usually the main factor in the improved condition. I will not further trouble my readers in this direction, for most of them doubtless have their own ideas on the subject, and would not be influenced by much more which could be added; but I desire to call attention to the method employed in all my cases, both in private and hospital practice, and I have never failed in the last ten years to relieve both spamenorrhœa or amenorrhœa in what now amounts to many hundreds of cases, some of these being of long duration and a number of them having gone the rounds of eminent practitioners, both general and specialist.

It is to be understood, of course, that the uterus and ovaries are present, or that the organs are so far developed as to permit of menstruation with or without ovulation. I have seen cases where years had been spent in vain efforts without the physician's learning that the patient had either a mere button at the cervix or no uterus at all. The next point, and a very important one, is to assure yourself that the female is not pregnant. Never mind if she is unmarried; I don't know how it is out west, but single women now and then in some mysterious way become *enciente* in our part of the country, and they will swear any kind of an oath, with both hands uplifted, that they are as ignorant of men's doings as a three-year-old child. The married ladies are as bad as their single sisters in this respect. They "know they are not pregnant; they can't be so, for John is away (a traveling salesman) in Michigan, and you know I had my sickness just as he left home, and he is away three months!" Satisfy yourself beyond contradiction that she is unimpregnated, and if any doubt exists, put her on a placebo—"hiccory-piccory" or the like will do—until it is too late to hide the dilemma, when they won't bother the doctor until the "consternation" (as a patient of mine once termed it) takes place.

In poorly-developed girls, who have never menstruated, galvanism is indicated to begin with—it tones them up, especially when combined with massage, cold bathing, and iron—the potassio-tartrate in good doses (10—20 grs. *ter die*) being preferable. The general health being good, Faradism is needed, and to be effectual, it must be localized to the uterus and appendages. Holding two tin handles in the hands won't do, neither will sponging the abdomen aimlessly, suffice. The current must traverse the uterus, or the uterus and ovaries

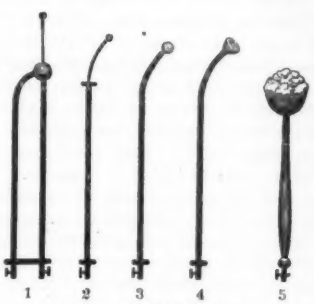


FIG. 1.—Rheophores.

as demanded. The rheophores used by myself are those illustrated. No. 1 is a double rheophore designed by myself to confine the current to the womb only, without the lateral diffusion attending electrical applications as usually managed. The straight rod is insulated to the tip and is moveable so as to reach any point in the cervix or go up to the fundus, which is the point of election with myself. The current enters by this rod, it escapes into the

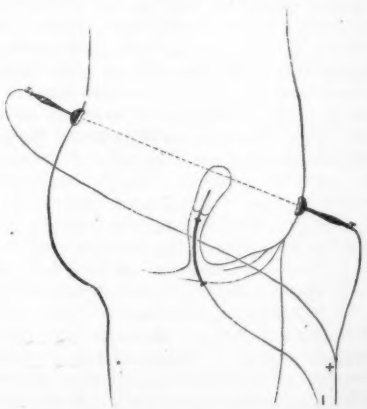


FIG 2.—Direct Uterine Electrization.

uterine body at the rounded point, travels down to the vaginal cervix and there encounters the ball (uninsulated), whence it is carried by the insulated curved rod to the flexible conductor, and so to the induction-coil or galvanic battery if that is being used. No. 2 is a sound, the curved portion of which is not insulated. It is introduced as the ordinary sound and the circuit completed by placing a sponge-handle such as No. 5 on the abdomen, or preferably over the genito-spinal centre. No. 3 is a round ball for application to either ovary per vaginam, and is insulated all but the spherical end. No. 4 is a cup electrode for engaging the os and cervix, and is also insulated up to the cup. The circuit is made as with No. 2. Fig. 2 illustrates the application of electricity by a divided current the positive pole being applied with a bifurcated cord to the "centre" and supra-pubic region, the current escaping through the insulated sound (No. 2.). The next figure exhibits the electrization of both ovaries and the uterus the anode on the ovary (conjoined), and the cathode at the fundus uteri. The speculum is not needed. The rheophores are not too large for employment in virgins, excepting No. 1, and a few of this class can accommodate it without trouble. The hymen is a very distensible outpost if gently handled.

The rheophores being in place, turn on the current gently, preferably through a rheostat. With galvanism from five to fifteen millivebers is the limit,* and Faradic currents should be such as are borne without inconvenience. Fifteen minutes is an average seance, but it may be prolonged for an hour or more, and repetitions should occur at least three times weekly, or in long standing cases oftener.

In stubborn cases static electricity is extremely valuable, and the best apparatus for generating

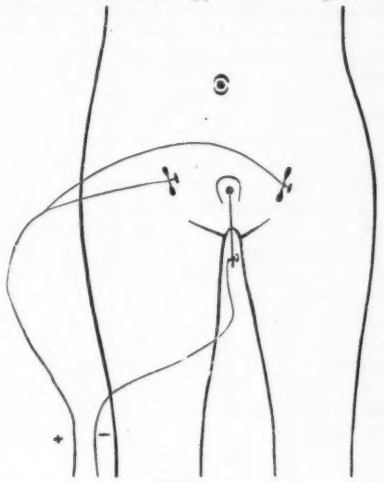
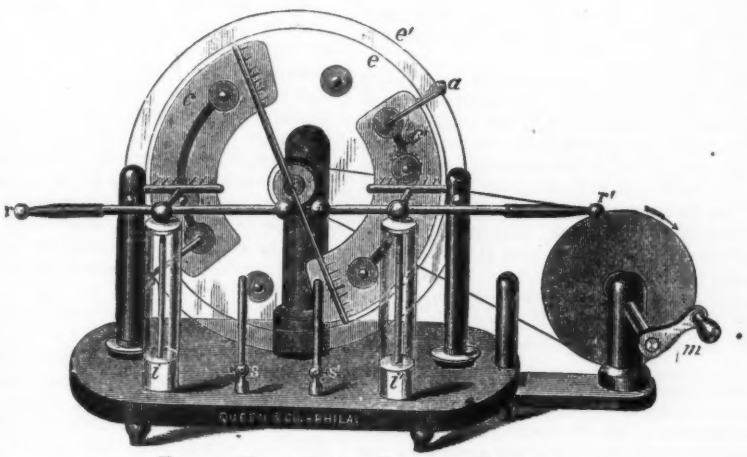


FIG. 3.

*A milliveber is one thousandth of a veber, and the latter is that quantity of electricity produced in a battery in one second of time by one volt through a resistance of one ohm. The veber is the unit of electrical quantity, and the volt the unit of electro-motive force. A current of 1 mv. is given by 3 Daniels, working through the average resistance of the human body. A galvanometer divided into units of absolute relative strength should always be included in a galvanic apparatus.



TŒPLER-HOLTZ STATIC ELECTRIC MACHINE.

FIG. 4.—The machine illustrated consists of a stationary adjustable back plate and a revolving front plate. When put in motion, a small quantity of electricity generated on the revolving plate is taken from the small metallic disks by brushes on the arms, $a\,a'$, and transferred to the armatures, $c\,c'$, on the back plate. This plate, when charged, reacts upon the revolving plate by induction, and electricity is taken therefrom by combs on the horizontal cross-arms, and passes by spark between the discharging-rods, $r\,r'$. When the condensers, $i\,i'$, are removed, the flow is continuous and of low tension; when they are in position, as represented in the cut, the discharge is in high tension, the sparks being smaller and more rapid as the sliding-rods, $r\,r'$, are nearer each other, and slower and denser, the greater the separation of the balls. The vertical cross-arm equalizes the charge on the revolving plate, and prevents the carrying of the positive charge to the negative inductor, and the negative to the positive. The arm should connect the upper left-hand disk with the lower right-hand disk of the armatures on the main plate. The revolution is (on the upper edge) from left to right. Charges of great quantity can be had through one or more Leyden jars, the potential being regulated by the size and number of jars employed.

reliable currents at all times, regardless of the weather, is the Toepler-Holtz of Messrs. James W. Queen & Co., of this city. The current should be employed as in Faradism or galvanism with the electrodes described, or the Leyden jar (pint size) can concentrate the "shock" of the older writers. I have seen the molimen menstruale occur at once after a strong static electrical application, and many patients have "come unwell" within an hour after Faradic treatment. Properly used, electricity is invaluable in amenorrhœa, and in many uterine or other pelvic complaints of women. Care and study are requisite in all electro-therapeutical manipulations; hap-hazard work will not do; it simply brings discredit on this invaluable agent. The idea that electricity will do no harm if it does no good is a mistake, for serious injury has resulted, especially in the hands of quacks. No physician who carefully treats his uterine troubles can dispense with a complete electrical outfit, and although the apparatus is expensive it soon repays its possessor both in pocket and reputation. Electricity is a CERTAIN *emmenagogue*.

Coca.

By Alexander Wilder, M. D., Newark, N. J.

I AM not altogether free from prejudice against much-vaunted new remedies. There is so much of the frothy charlatanism of the mountebank in the puffing which they sometimes receive, that I feel like keeping still and holding my opinion in reserve till that has all subsided. It is hardly safe to say much, perhaps to think much, till the superlative adjectives have subsided.

Besides this, we have not exhausted the wisdom of the older pharmacopœia. Fashionable as it is for parvenus and bigots to decry Samuel Thomson, the little materia medica which he constructed, and the means of cure which he employed, are not discarded, but employed with advantage. They constituted the first great enunciation of our century, and opened the way for new thinking, new practices and new views. I have seen the polite effort to cabbage the honor for Jack Bigelow, but I am not certain that Jack Bigelow did not himself take his cue from the rough old New Hampshire Yankee. Broadcloth counts for more than homespun.

A worthy physician whom I have known for many years wrote a little paper on "The Re-study of Old Remedies," which ought to be carefully weighed. We don't half know the virtues of the remedies that we have, and employ them very likely for purposes less important than those which they may be made to subserve. I am the more strenuous in this matter as I am a dissenter from the old methods, and not very partial to reformers, who would mongrelise the materia medica and compound Christ with Belial.

Pardon such a prologue to what I have to say. I have for five years past anxiously considered the merits of the "New Remedies" which have been almost crowded into the materia medica. I do not object to them for being new. In the prodigious variety of vegetation that this earth produces, a variety which may be even now increasing by newer evolutions, for aught we know, there exists good reason for belief that a prodigious number of medicaments, safer and better than those which we now know, are ready at our hand, when we have the wit to find them out. Perhaps not merely will health be promoted and restored, but the span of life itself extended.

During the last season it occurred to me to experiment with coca. I had read descriptions of its effects, which, I must acknowledge, greatly attracted me. I do not think I am very lazy, for I never saw the time when I was willingly unemployed; nor am I quite like the individual who pleaded that he was not lazy but always tired. Yet in the days that the air is over-moist and otherwise stagnant and the reverse of bracing, as well as when I have written twenty pages of foolscap or as many letters, I find a sense of fag or weariness almost unendurable.

From the description of coca and its effects, I imagined it worth my while to try it. I accordingly procured the fluid extract. Whether I took too much or too little I do not know. The apparent results did not seem conclusive. By the courtesy of the Messrs. Parke, Davis & Co., I was favored with two packages of desiccated leaves This is an agreeable method to me. I have not served my apprenticeship at the quid or cigar, but kept my mouth and body pretty clean. In my beliefs I am a philosopher, and so have convictions in that direction.

I made use of the leaves in the hottest weather of summer, and when I felt exhausted almost to a deathly feebleness, observing apparent effects as carefully as I could, and making sure that imagination alone did not create them. I am not yet satisfied in all my wishes or expectations. Perhaps that is my own fault. Several times, especially in later trials, I perceived little change of sensation or bodily condition. But I oftenest noted the following effect: I would resort to the coca about eleven or two o'clock in the day-time, or at the periods when the sense of exhaustion, vital depression on "goneness" were most annoying. In a quarter of an hour or a little longer, a strange disposition to sleep would ensue, which I yielded to or disregarded as external circumstances required or permitted. When this had passed by, I experienced a vivid sense of being refreshed, elasticity of spirits, and ability to engage in study or any laborious mental application which remained so for hours. Once or twice while at the Concord school, I was attacked rather ungentlemanly by an Episcopal clergyman, and noticed with some curiosity a peculiar feeling of indifference to what he said. This was unlike my usual disposition. I could but attribute this to the drug. There was no intoxication, nothing like any suspension of faculty; but the natural sensitiveness to outrage, was sensibly obliterated.

Indeed, there was less disposition to go to sleep, after the first somnolent feeling had gone by or been satisfied. But the counterpart of healthful natural action was so perfect that it required a day or two to learn that it was the influence of coca.

I induced a lady to test it for a nervous headache. She did not try the experiment well, but she was greatly relieved. I have not been able to satisfy myself in regard to its value in any form of actual sickness.

It seems to me to moderate the demand for food, and to reduce the quantity of excretive matter, especially that of the kidneys. I discover no no ureic accumulation as a result of this, or any apparent mischief. It presented no condition of undue excitement; but seems rather to enhance the vital powers. I am now apparently in better health than I have been for a long time. Perhaps if I had prosecuted this matter with more energy, I might have found myself younger; but so far as I have gone with it, I am very well pleased.

Abstracts from Meteorological Reports, Silver Cliff, Colorado.

By A. Comstock, M. D., Silver Cliff, Colorado.

THE following is abstracted from the meteorological observations taken at this point during the months of July, August and September. I shall have occasion to refer to them in a future article. When "rain" is noted it refers to an afternoon shower, and the clouds obscure the sun light till after he is set. Hence the decline of temperature:

ABOVE ZERO.

1882.	8 A. M.	5 P. M.
July 1.	60°	70°
" 2.	66°	70°
" 3.	63°	78°
" 4.	62°	76°
" 5.	60°	78°
" 6.	61°	70°
" 7.	62°	73°
" 8.	61°	75°
" 9.	60°	68° rain.
" 10.	63°	70°
" 11.	62°	78°
" 12.	65°	80°
" 13.	68°	75°
" 14.	64°	68° rain.
" 15.	65°	70°
" 16.	67°	72°
" 17.	60°	75°
" 18.	59°	70°
" 19.	58°	67° rain.
" 20.	58°	63° rain.
" 21.	58°	66° rain.
" 22.	60°	71°
" 23.	60°	68°
" 24.	61°	70°
" 25.	60°	68°
" 26.	60°	68° rain.
" 27.	58°	67° rain.
" 28.	54°	66° rain.
" 29.	54°	63° rain.
" 30.	55°	70°
" 31.	57°	70°
Aug. 1.	60°	80°
" 2.	60°	80°
" 3.	63°	68° rain.
" 4	50°	70°
" 5.	55°	71°
" 6.	55°	79°
" 7.	58°	80°
" 8.	60°	80°

1882.	8 A. M.	8 P. M.
Aug. 9.	58°	75°
" 10.	60°	80°
" 11.	60°	80°
" 12.	60°	80°
" 13.	60°	62° rain.
" 14.	59°	75°
" 15.	56°	68° rain.
" 16.	57°	82°
" 17.	56°	80°
" 18.	56°	80°
" 19.	57°	82°
" 20.	67°	75° rain.
" 21.	60°	65° rain.
" 22.	60°	72°
" 23.	60°	80°
" 24.	60°	80°
" 25.	59°	82°
" 26.	6	75°
" 27.	60°	75°
" 28.	60°	65° rain.
" 29	55°	50° snow
" 30.	51°	50° on
" 31.	48°	53° mountain.
Sept. 1.	42°	68°
" 2.	50°	68°
" 3.	50°	68°
" 4.	46°	68°
" 5.	49°	64°
" 6	50°	70°
" 7	55°	70°
" 8.	50°	70°
" 9.	54°	75°
" 10.	55°	75°
" 11.	56°	75°
" 12	56°	80°
" 13.	60°	80°
" 14.	60°	75°
" 15.	60°	66°
" 16.	58°	65°
" 17.	50°	50° rain.
" 18.	45°	62°
" 19.	45°	54° snow on mountain.
" 20.	42°	65°
" 21.	45°	70°
" 22.	45°	68°
" 23.	40°	70°
" 24.	50°	70°
" 25.	48°	67°
" 26.	46°	66°
" 27.	46°	68°
" 28.	49°	70°
" 29.	50°	69°
" 30.	49°	70°

An Untoward Action of Grindelia Robusta and Eriodictyon.

By Geo. Herschell, M. D. (London University), London, Eng.

HAVING been very successful for some time past with these drugs in treating chronic bronchitis and asthma, I was much surprised by the following experience. It is briefly as follows:

T. H., æt. about 34, a case of many years' standing, of chronic bronchitis, emphysema, with dilated bronchial tubes, and occasional attacks of pure asthma, came under my care in the beginning of last month.

He had gone the round of the chief London physicians, and had been treated, besides the usual remedies, with inhalation of vin. ipecac, in the form of spray, dry inhalations of creosote, faradisation of the vagus nerve, and stramonium cigarettes, without benefit. Rendered confident by previous

successfully treated cases, I prescribed the following:

℞ Fluid ext. grindelia robusta, ʒj
Fluid ext. eriodyction Californ. ʒj
Ext. malt, ʒij.

M. Sig. Take one teaspoonful three times a day.

To my great surprise urgent dyspnœa came on about twenty minutes after the first dose. It lasted for about an hour. The same thing occurred after the second and third doses, the dyspnœa becoming more urgent and lasting longer each time. The fourth dose we diminished to one-half. The same effect was produced, only to a less degree.

It is impossible that the dyspnœa could have been a mere coincidence, as it followed the dose with certainty, diminished when we diminished the dose, and ceased when the medicine was discontinued.

The patient was so convinced as to the relation between cause and effect that he refused to continue the drug.

On searching authorities to see if I could find anything that would throw light on this curious case, I found the following statement by Dr. Geo. Johnson, of London, reported in Naphey's Therapeutics, p. 133. "Stimulating expectorants *** sometimes tighten the breath and increase dyspnœa *** by suddenly checking secretion."

I should be glad to hear of any similar case in the experience of any other physician.

29 Moorgate St., London.

Treatment of Syphilis.

By I. J. M. Goss, A. M., M. D., Marietta, Ga.

IT has been long a mooted question whether or not syphilis can be cured by vegetable alteratives and the iodides, without mercury. And the question is still undecided. Eclectic physicians affirm that syphilis can be cured without mercury, regular physicians and homœopaths declaring that it cannot. One of the great reasons that first caused some physicians to lose confidence in and to discard mercury, was the abuse of the article—the toxical effects, which are salivation, and its long train of evil consequences. Headland, though an advocate for mercury, says (in his Action of Medicines, page 365): "Mercury decomposes the blood and wastes the body." Then on page 369, he says: "Large quantities of mercury corrode the stomach." Then on page 370, he says: "One drachm of mercurial ointment rubbed into the skin may be followed by violent salivation, or produce necrosis of the jaw, and death. Thus the action of calomel and blue mass depends upon the system, and not upon the dose." Again, on page 371, he says: "In many old histories of syphilis, it is too painfully apparent to us that a large portion at least of the recorded symptoms was due to the enormous amounts of mercury given." On page 372, he says: "It is an agent of terrible activity, and we may well be cautious how we handle it." And again he says, on page 373: "Mercury deteriorates the blood, diminishing in it the amount of fibrine and corpuscles." Again, on page 377, he says: "Mercury is a poison while it remains in the system, and must leave the system before health can be re-established." Ringer says, on page 200 of his Materia Medica: "The salts of mercury, given too freely, too long, or under improper circumstances, inflict great harm by aggravating the disease they were intended to cure." He says again, on page 203: "It is necessary to say that sometimes syphilitic patients are apparently completely cured of syphilis without mercury." And again (same page): "Cases of syphilis occur—very often, too—which are entirely uninfluenced by mercury. The firmest believers in the efficacy of mercury in syphilis are unanimously agreed that it is not only undesirable, but pernicious, to salivate."

Bartholow, on page 236 of his admirable work on Materia Medica, says: "The important rule is not to induce ptyalism." On page 230, he says: "Without producing such obvious effects, as ptyalism, mercurial cachexia, eczema, and diseases of the bones and obscure nervous phenomena may result. Among these may be enumerated headache, loss of memory, trembling, defects of coördination, disorders of sensation, convulsions, and dementia." There never has been greater discrepancy of opinion in regard to the action of any one remedy than there has been in regard to that of mercury. And that division of opinion, somewhat modified, still exists. Such has been the zeal with which some men have advocated the use of mercury, even to ptyalism, that it has resulted in a great division of the profession, which is greatly to be deplored. Now, in the midst of this controversy, I propose to give the advocates of mercury a preparation that they may give with entire safety, and tenfold the success of that of the other preparations. It is a double iodide of mercury and potassium—$Hg\ K_2\ I_4$. This is a canary-yellow salt, formed by the union of one equivalent of bin-iodide of mercury and two equivalents of iodide of potassium, which is freely soluble in water. Or, I use the following preparation, viz.: Iodide of potass., 2 ʒ; biniodide of mercury, 2 grs., thoroughly triturated in a mortar until well incorporated; then 1 to 2 grs. of this may be added to 4 ʒ of water, and given in doses of 30 to 60 gtts. three or four times a day. This preparation has a profound action upon the glandular system. It is freely soluble in water, and the iodide of potassium having such a strong affinity for the mercury that it cannot possibly inhere in the system, as other preparations of mercury are known to do, and thereby produce all the evil effects of the drug. All the other preparations are known to inhere in the system with great tenacity, thereby producing all the toxical effects of this drug. The doses of this preparation may be stated at 1–30 of a grain, three times a day, well diluted. And if given in the above doses will never inhere in the system, and I am not apprised of any possibility of salivation from larger doses; but as it is a local irritant to the gastric mucous membrane, like iodine itself, it will not be tolerated in large doses, nor is it necessary in larger doses than that given above to produce effect. The chloride of gold and sodium is applicable to all old cases of syphilis, especially to such as do not yield to the above iodide. It is a valuable remedy in syphilitic ulcerations of the

throat, syphilitic ozœna, necrosis of the bones, and syphilitic phthisis. The dose is about 1–60 to 1–50 of a grain, dissolved in a large quantity of water, repeated three times a day. As a local remedy. I have found iodoform ointment a good application to the bubo, and also to chancres. In the secondary and tertiary form of syphilis stillingia has remarkable effect, in doses of 25 to 30 gtts. of a tincture from the fresh root, given, well diluted, three times a day. Dr. Porcher says that he has used the stillingia in old syphilitic sores, in the Charleston hospital, which controlled them when nothing else would. He says he cured phagedenic chancres rapidly with it. I have recently used two new remedies with marked success, that is: caroba-jacaranda procera, from Brazil, and cascara amarga—bark Honduras, introduced by Parke, Davis & Co. I have used these remedies, combined, in a very bad case of secondary syphilis with fine success. Corydalis formosa—the turkey pea—I have also used with good effect. For the primary chancre nitric acid, applied locally, is a very valuable remedy. And for old cases, after the too free use of mercury, with ulceration of the mouth, soft ulcers, and cracks of the lips, nitric acid, in doses of 2 to 3 gtts., three times a day, is valuable. Berberis aquifol. is producing fine effect in tertiary syphilis, alternated with the iodide of potassium, dose 30 to 40 gtts. of Parke, Davis & Co.'s fluid extract, three times a day. For the secondary form, periostitis and ulcerations, phytolacca has acquired some reputation; the dose is 5 gtts. of the tinct. of the fresh root.

Reports on New Remedies.

From Private Practice.

Berberis Aquifolium.

By W. H. Snyder, M. D. Hastings, Barry Co. Mich.

IN December, 1880, a Mrs. Williams, of Potterville Eaton Co., about 35 years of age, body well nourished, presented herself to me with a typical case of psoriasis diffusa, involving one-half of the face and nearly one half of the body down the side of the hips. She had been under treatment by several physicians of Lansing and Charlotte, both regular and homeopath, but growing gradually worse instead of better I prescribed,

℞ Fl. ex. berberis aquifol., ʒ ii.
Acetate potash, ʒ iii.
Simp. syrup q. s., ad ʒ vi.

M. S.—Teaspoonful four times a day.

Also :—

℞ Muriate tinct. iron, ʒ ss.
Glycerine, q. s. ad ʒ vi.

M. S.—Apply night and morning.

In two weeks changed treatment. Prescribed,

℞ Fl. ex. berberis aquifol. ʒ ii.
Simp. syrup, q. s. ad ʒ vi.

M. S.—Teaspoonful four times a day.

Continued the use for three months. Patient discharged, cured.

The second case upon which I tested the berberis aquifolium, was in May, 1881; was a man who had a scaly eruption on the arms and legs, like fish scales, covering the fore part of both arms and legs. I prescribed,

℞ Fl. ex. berberis aquifol., ʒ ii.
Simp. syrup, q. s. ad ʒ viii.

M. S. One teaspoonful three times a day.

Also used,

℞ Muriate tinct. iron, ʒ ii.
Glycerine, ʒ iv.

M. S. Apply to the skin nights.

I continued the treatment, and at harvest he was able to work with his sleeves rolled up, and no sight of the eruption has troubled him since.

Case third. I was called to see Mrs. Wm. Myers, Hastings, Mich., June 25, 1882, whom I found suffering with a terrible eruption, covering the fore part of the scalp and extending downward over part of the face; and was told that she had been under treatment for two years by several physicians; told her that I could cure her in three months. I prescribed:

℞ Fl. ex. berberis aquifol., ʒ iss
Simp. syrup, q. s. ad ʒ iv.

M. S. One teaspoonful three times a day.

Also used:

℞ Muriate tinct. iron, ʒ iii.
Glycerine, ʒ iv.

M. S. Apply night and morning after washing the scalp with sulphur soap.

I continued treatment and in six weeks discharged the patient, cured of a disease that had troubled her for two years.

I, of course, use remedies such as washes and ointments, but must say I am entirely satisfied that the berberis aquifolium was a valuable agent in all the cases reported above.

Viburnum Prunifolium in Threatened Abortion.

By E. T. Metcalf, M. D., Tallula, Ill.

FROM seeing frequent mention of the remarkable property of viburnum prunifolium in controlling uterine contractions, I was induced recently to use it in a case of threatened abortion with the following results:

Sept. 28th 1882 was hastily called from bed to see Mrs. F., whose husband informed me that she was flooding, and in great pain; was taken quite suddenly on waking from sleep, after having retired feeling as well as usual, but fatigued from a hard day's work at the wash-tub, and quilting. I found the lady (who is a delicate woman, with a highly sensitive nervous organization) very much alarmed, with regular pains occurring at intervals of five minutes, and considerable hemorrhage. Pain chiefly complained of in small of the back, but uterine contraction marked enough to be plainly manifest to the touch in applying the hand over the abdomen. The patient between the seventh and eighth month of her pregnancy. I administered morphia in eighth grain doses every two hours until pain should be relieved.

Called at nine A. M., next morning. Patient drowsy after having taken three of the powders, pain not quite so severe, but hemorrhage still present, considerable nausea from the morphia which I was informed always followed its use, and before prescribing it had learned that she could bear but

small doses in consequence of such results. I at once ordered fluid extract viburnum, to be taken ever hour in teaspoonful doses, until I should see the patient again, and retired. Called again in the evening, found the hemorrhage had ceased, pain however as great as ever but not so frequent, nausea relieved, but patient quite nervous; ordered bromide potassium, and continued viburnum; requested to be called if taken worse during the night; left the lady, and returned in the morning to find her feeling well, pain all gone, had slept well and had partaken of some refreshment. Continued the viburnum every two hours. Saw her again in the evening feeling entirely relieved, no pain, no hemorrhage, and expressing a desire to be out of bed. Directed viburnum to be continued in same doses three times a day for a week and dismissed the case. Have since learned the patient is as well as ever.

The results of this case seem to be due wholly to the viburnum, and I shall use it again with confidence.

Jamaica Dogwood and Damiana.

By W. A. Johnston, M. D., Raleigh, Ind.

I HAVE had considerable experience with Jamaica dogwood in quite a variety of cases and believe that in it we have a remedy that is nearer a specific for toothache than any other local application. I have had fair success with it as an anodyne instead of opium, but have found a few cases in which it would not produce any effect. Where its action as an anodyne was produced, however, it was superior to opium in not causing constipation. Damiana thus far has proven a fine general tonic, improving digestion and imparting tonicity to the nervous system. I have, as yet, no experience with it as an aphrodisiac. I am at present giving it a trial in a case of palpitation of the heart caused mainly by masturbation. Am using it in small doses in connection with cactus, G. Will report on its action in this case in the future.

Sabbatia Campestris, Grindelia Robusta, Eucalyptus, Cascara Sagrada, Rhus Aromatica.

By G. Padiera, M. D., Rochester, N. Y.

CASE 1. Female, æt. 17 years; malarial fever, excessive bilious vomiting, could not retain anything; quinine had been given, but was refused by the irritable stomach. Supported vital force by enema of beef tea and brandy and yolk of an egg every six hours night and day. Prescribed:

℞ Fl. ext. sabbatia campestris.
Gentian. quinq. flor., ää 3 ss.

Every three hours.

She retained the medicine and made a complete recovery. Proper attention was, of course, given to disinfecting the premises and such necessary hygiene. This patient was sick eight months before she came to me, and was treated by me two months.

Case 2. Female, 16 years old; scrofulous eczema of external ear. Prescribed:

℞ Syr. iod. ferri, 3 ss.

Three times a day, and directed an external application of:

℞ Fl. ext. grindelia robusta, 3 ij.
Vaseline, ℥ j.

M.

Effected a complete cure.

Case 3. Sister in a convent, about 45 years old; chronic ulcer of stomach, seven years' standing, was treated by me all that time without success. Finally prescribed:

℞ Fl. ext. eucalyptus, gtt. x.
Tr. card. comp., q. s. ft., 3 ss.

With proper dietary measures, a cure was effected in seven months.

Case 4. Male, 50 years old; atonic dyspepsia with congestion of liver; had been sick 20 years; greatly emaciated and discouraged. Prescribed:

℞ Fl. ext. cascara sagrada, gtt. v.
Fl. ext. wood betony, gtt. xxv.

M. Forty-five minutes before meals.

Gave directions for diet: milk, gruel, rice, etc.; subsequently beef tea. Obtained a complete cure. In six months the patient had gained 20 pounds, and can now eat his roast beef and smoke a cigar with comfort.

Case 5. Male, 48 years old; chronic gastritis with hyperæmia of liver and cirrhosis in first stage, with all the accompanying symptoms. Caused by alcoholism. Prescribed:

℞ Fl. ext. cascara sagrada, gtt. x.
Fl. ext. wood betony, gtt. xxv.
Tinc. card. co.
Simple syrup, ää 3 ss.

M. S. Three times a day, before meals.

Entirely cured in two months.

Case 6. Female, 58 years old, nurse in a hospital; chronic cystitis for many years. Prescribed:

℞ Fl. ext. rhus aromat., 3 ss.

Every three hours, and effected a cure.

The last case will exemplify my experience with new remedies. In this instance, the patient at first failed to derive any benefit from the prescription, and upon investigation I found the druggist had substituted some other preparation for that of Parke, Davis & Co. When the proper article was procured a rapid recovery followed. Without any desire to express a prejudiced opinion, I would state that the only certain way to procure the results stated herein is to insist upon using Parke, Davis & Co.'s preparations.

Hospital Reports on New Remedies

[Reported by F. E. Stewart, M. D., Ph. G., for the THERAPEUTIC GAZETTE.]

Eye Clinic Southwestern Hospital, Philadelphia, Pa.

Service of H. F. Hansell, A. M., M. D.

Chronic Rheumatic Iritis.—Mrs. E. K., æt. 58, widow, presented herself at the hospital, Oct. 11, 1882, complaining of dimness of vision of the left eye. Four weeks before she had very severe neuralgic pain in the region of the left eye, with eye red and inflamed, sensitive to light, and partial loss of vision. These symptoms were treated by her family physicians with large doses of quinine, extract of belladonna

and morphia, regulation of diet, etc.; but with no local application to the eye. The patient gave a history of rheumatic pains in the joints, appearing at irregular intervals. No previous history of any inflammation of the eye. At her first visit examination of the eye revealed the following condition: Central partial loss of substance of cornea, conjunctiva red and inflamed, pupil small, insensible to light and darkness, pupillary margin of iris completely bound down to the capsule of the lens, inflammatory products partially occluding pupil. Vision—$\frac{15}{c}$, or about one-sixth of normal. No glass improved the sight. Right eye normal.

Diagnosis—Chronic rheumatic iritis, with complete posterior synechiæ (from two Greek words, meaning to hold together—*i. e.*, adhesion between iris and crystalline lens).

Treatment—Ordered sol. atropia, 4 grs. to oz. of distilled water, dropped into the eye every two hours, preceded by bathing the eye for fifteen minutes with hot water. The most effective means of applying hot water to internal inflammations of the eye is to tell the patient to begin with warm water and gradually increase the temperature by addition of hot water until the water is as hot as it can be borne. This process is most conveniently carried out by directing the patient to stand with his head over a basin, and throw the hot water against his eye with his hand, the object being to thoroughly bathe the eye. It is surprising how much benefit this often affords, relieving the acute pain of the inflammation. Cold water for conjunctival diseases and hot water for iritis and internal inflammations, is the most approved treatment. Hot water sometimes produces acute catarrhal conjunctivitis, which is cured by one or two applications of cold water.

In addition to this treatment the patient was placed on constitutional treatment, consisting of mucurial ointment ʒ iii, in 24 hours, rubbed into the sole of her feet, and arm-pits. This treatment was pursued for four days with almost no effect for good, the only impression made on the adhesions (synechiæ) by the frequent instillation of this strong solution of atropia was the tearing off of one small adhesion in the upper part of the pupil. Therapeutically, in the stage that this case was presented to us, it was a failure. If the diagnosis of iritis had been made, as it should have been, early in the case, an entire cure would most most probably have resulted. It is very important to remember that in the treatment of nearly every inflammation of the eye atropia is of the greatest benefit, instilled early and often. Its use is never attended with harm except in the single disease glaucoma. As a final step iridectomy must be resorted to in order to re-establish the communication between the anterior and posterior chambers, to avoid the risk of secondary glaucoma and complete loss of sight. It can be laid down as a universal rule that the communication must be established between the anterior and posterior chambers in all cases of complete posterior synechia, when the sight is not entirely gone, and even then when the pain is severe.

Anna H., æt. 3, came to the dispensary Sept. 28, 1882. History: eight days after birth both eyes were severely inflamed. She was treated at the Children's Hospital, and apparently recovered with no opacities on the cornea, in two weeks; but at this time her mother noticed that her eyes were crossed. Since that time she has had repeated attacks of inflammation in both eyes. Treatment unknown—partly by regular physicians, and partly by quack medicines.

Condition when first seen: she was a small twin child, presenting every appearance of scrofulous cachexia. Legs and arms emaciated; belly puffed out; lips swollen and protruding, especially the upper; skin of upper lip excoriated by a constant profuse discharge from her nose; bridge of nose flattened; eyelide closed firmly, and considerably swollen; intense photophobia (dread of light), her eyes never opening except in a darkened room. At home she spent her time with her head buried in a curtain or in her mother's lap.

Examination: when her lids were separated by fingers or lid elevator, the tears gushed out. Both conjunctivæ slightly inflamed. The right cornea had lost its transparency and was the seat of inflammation and newly-formed blood vessels. The left cornea presented the same disease in a milder form; both pupils were contracted; no iritis.

Diagnosis: Vascular keratitis (inflammation of cornea) in a scrofulous patient.

Treatment: In this form of eye disease it is hard to determine which is the more important, local or constitutional treatment. Each occupies its appropriate place, and each must be attended to in the most careful and thorough manner—in fact, local treatment is of no use without constitutional treatment, and on the other hand, the constitutional treatment is made efficient only by he local treatment.

This little patient had been allowed the greatest freedom in the choice of food—tea, coffee, pie, cake, etc. Her diet was restricted to milk, an abundance of which was enjoined, and raw meat. Medicinally 15 drops of fl. ext. berberis aquifolium, three times daily in milk, was prescribed. Locally, atropia (2 grs. to ʒ i.), weak astringents (borax, 5 grs. to ʒ i.—tannic acid, 5 grs. to ʒ i.) were employed daily. Her improvement was immediate, and continued for about two weeks; she opened her eyes, her lips healed up, catarrh stopped, and she gained flesh. An imprudent exposure to the weather resulted in a partial relapse at this time. The local treatment was continued, the constitutional changed—desiccated blood being substituted in place of the berberis aquifolium, alterative treatment seeming to be no longer indicated, but "building up" measures essential. No improvement, however, resulted, and an inspection of the desiccated blood, which was prescribed in solution with brandy and glycerine, revealed only a partial solution of the blood, owing to want of care or knowledge in preparation. A fresh solution was ordered from a reliable pharmacist, and already, after two days, improvement is noted.

Correspondence.

Dr. Chamberlain's "Theology."

Among the many curious *private* letters I received in response to my article in the September number of the GAZETTE, on "What is Wrong with our Emmenagogues?" is one from a certain Dr. Jacob Chamberlain, D. D., Missionary of the Arcot Mission, India, in the interests of the Reformed Church in America. Deeming it "too good a thing" to enjoy alone, I hasten to share it with my professional brethren the world over. How true or false the reverend doctor's "theology" may be, I also leave with you. Let me say this, however, that at no time in the history of medicine as at the present time are the advancements of medicine to an absolute science so closely questioned, so closely scrutinized and so alarmingly "shaky" from pillar to rafter. The "degeneracy of medicine" has been no idle mouth piece. When medicine as a "science" and a "success" devolves itself into personal magnetism, social influence, fine horses and fine carriages, costly raiment and fine linen, peculiarities of speech, bearings and appearance, ye who enter the portals of its temples, first cast from ye the honesty of men!

NEW YORK, Oct. 9, 1882.

My Dear Doctor:

Your communication in the September issue of THE THERAPEUTIC GAZETTE, page 334, is answered in a very few words, viz: Therapeutics is decidedly empirical in the practice of medicine. It is now just a quarter of a century since the much coveted "sheep skin" was handed to me. I then, as you, and the majority of all others do, believed all what our professors on practice taught. But a few years after my being in active practice, my eyes were opened to the fallacies, uncertainties, of what I was taught, and I at once saw what you now see and complain of.

Dear doctor, always remember the following:

1. Nature is the Great Physician.
2. The great secret in medicine is to know when not to give medicines.
3. That we are all here to die.
4. That patients will get well in spite of all treatment.
5. That patients will die in spite of all treatment.
6. Hygienic measures are of all the best treatments.
7. Never drug a hopeless case.
8. Never drug a case not hopeless.
9. Bear in mind, patients will recover without medicines.

My medicine chest is in the corner, a relic of the past twenty years.

My little satchel is of late placed on top of said chest, and is also about to be a relic, of the past seven years.

My vest-pocket case, with its tiny vials of granules, parvules and powders, is all that is left of my "medical theology," of which I have been tearing out a leaf yearly to date. After a while, there will be nothing left, I presume, but a few fancy shaped vials. That day is fast approaching. Dear doctor, depend on it.

Our medical teachers must soon turn over a new leaf, rest assured. I am no homœopath, but have torn loose my moorings of all *pathies*, and make use of anything and all that will alleviate and relieve human sufferings.

I find good in everything, and find bad in everything; I take the good and leave the bad.

In medicine, politics and religion I am liberal. I find good and bad in all. So then, dear doctor, you will not inquire hereafter

"WHAT IS WRONG ——— "

CHARLES H. MILLER.

PEABODY, Kansas.

Quebracho in Dyspnœa.

Being a reader of the GAZETTE and a practitioner of medicine, I feel indebted not only to medical literature as nurtured by your careful hands in the columns of the GAZETTE but to those patient painstaking practitioners who through your columns have so liberally contributed to build up our stock of therapeutical knowledge. To redeem a long felt obligation and pay a part of the debt, I will send you a short report on the action of quebracho in dyspnœa as studied by myself at the bedside of a case of catarrhal or broncho-pneumonia in a child two years of age. Its general condition was good; aside from the pulmonary trouble there were no evidences of mal-nutritition or disease. Upon examination I found the pupils strongly contracted. General cyanosis. First sound of the heart, weak, breathing slow and difficult, extremities cold, bathed with a clammy sweat, and all the eye could see indicated immediate dissolution. Upon listening to the chest I found upon both sides a broncho-vesicular murmur, the bronchial predominating, subcrepitant and mucous râles generally distributed over the chest. Pulse scarcely perceptible, irregular and dicrotic. The contracted pupils, slow breathing, cold sweat and cyanosis, suggested narcotism by opiates and upon enquiry I learned they had employed another doctor who had told them he was giving small doses of morphia in his cough mixture, establishing beyond a doubt the fact that the patient was suffering from a medicinal as well as an essential disease. My first thought was quebracho with nux and belladonna, alternately. The latter to antagonise the morphia and stimulate the respiratory nerve centers, and the former for its supposed effect in dyspnœa. In addition to these I exposed its breast and poured upon it from a height ice cold water which caused an involuntary respiratory act, a corresponding increase in the force of the heart's contractions and a perceptible change for the better. As soon as my patient rallied from the ill effects of the narcotic I resolved to give the quebracho alone, with a view of testing its virtue in the dyspnœa which still continued. I gave it in two to four drop doses every half hour and found that the cyanosis which was still marked gradually passed away. The circulation greatly improved, intellectual faculties became normal, kidneys and bowels operated nicely and a speedy and complete recovery seemed certain. The effects upon the arterial system were those peculiar to a positive tonic, such as not only excites the motor tracts of the brain and spine but the vaso-motor centres of the ganglionic system and medulla oblongata. I am inclined to believe that its action is that of an excitant of the rythmically discharging centres thereby increasing their ability to generate and discharge the kinetic force necessary to carry on the function of the respiratory and circulatory systems, thereby increasing tissue change in those centres by a more thorough oxidation of the blood and elimination of carbonic acid by the lungs. Hypothetically we might look for properties (physiological) similar to strychnia in its action upon the respiratory and circulatory centres and similar to belladonna as a physiological antidote to opium. You will pardon my digression and we will return to our case. The dyspnœa disappeared for about 40 hours, when it again returned, and gradually grew worse until on the 14th day, death closed the scene in spite of quebracho or anything we could do. I have always thought

that if the drug had been given before extensive collapse of pulmonary lobules had taken place, my patient would have been saved and I should have enjoyed the pleasure of seeing a new remedy fill a place in the materia medica, so long vacant for it.

P. P. SHORTS, M. D.

LUDINGTON, MICH.

The Recent Overthrow of the Compulsory Vaccination Law in Switzerland.

The recent rejection of the *Epedemien Gesetz*, or as Professor Adolf Vogt, of Berne University, says it may be more appropriately described, the compulsory vaccination law, by a majority of 253,-968 against 67,820, has created quite an excitement amongst the defenders of vaccination both in England and various parts of the continent. The opponents of compulsory vaccination are hardly surprised, therefore, at the various persistent attempts made to diminish the significance of such an overwhelming vaccination defeat. It is no unusual occurrence when the struggle is keen and party feeling intense, to attribute defeat to causes which were scarcely felt or discussed during the contest. The same tactics have been adopted in every struggle for freedom and personal rights, since men began to emerge out of a condition of serfdom. To appreciate the true position of affairs it must not be forgotten that the law passed by the Federal Chambers on the 31st of January last, was preceded by a prolonged and active discussion on the vaccination question all along the line, arising mainly out of the post-card medical inquiry on this, the chief *point d'appui* and *point d'attaque* of the epidemic law. Literature on the subject was circulated broadcast by the agents of the Swiss Anti-Vaccination League and their supporters. The manifesto of the Referendum Committee declares that they particularly object to vaccination, the utility of which is not only placed in doubt, but is directly contested by scientific evidence of the highest character. The committee remind the electors that by voting for the bill they will expose themselves and their children to the dangers of blood poisoning without hope or possibility of finding any useful effect, and that such legislation will prevent new scientific discoveries being adopted for the prevention of epidemics because vaccination will be fastened upon the community. It is believed by not a few enlightened persons who have taken the trouble to canvass the opinions of the parents in England also that a *plébiscite* would in like manner result in the overthrow of compulsory vaccination by a vote proportionately as large or larger than that of Switzerland. The hatred to medical interference when unsolicited, and the respect for parental rights and parental responsibility is as strong in England as in Switzerland. The fact that out of say a quarter of a million prescriptions known to the medical profession, vaccination is the only one enforced by the terrors of the police court and the gaol is, to say the least, a questionable social anomaly.

WILLIAM TEBB,
Hon. Secretary.

7 Albert Road, Regents Park, London.

Common Hemp Seed as a Galactagogue.

The common hemp seed appears to be the substance which yields the extract, which is used in China to promote the lacteal secretion. Dr. Mann, of the State Medical Relief office, Adelaide, S. A., is my informant. He has recently arrived from Amay in China, and was acquainted with Drs. Jones and Muller of that city, of whom I have previously written to you.

As the medical hospital of this city is at present disorganized, and likely to be so about three months longer, I have not been able to properly test the three cardiac sedatives you have sent me. The cereus bonplandii, however, has so far yielded required results. All the Hospital, Medical and Medical University appointments in this city are now vacant. If my candidature be successful, I hope to pursue experimental therapeutics with some result.

T. B. BE GRAND, M. D.

SYDNEY, Australia, July 16, 1882.

Xanthium Strumarium or Bidens Frondosa.

In the February number, page 49, is a communication in relation to the "cockle-burr." The editor adds it is Xanthium Strumarium and "the use is a new one."

Permit me to suggest that the doctor may have referred to Bidens Frondosa, which is very commonly called as if spelled "kuckel," and is in some parts of Indiana and Illinois as well as in Maryland pronounced "kawkle" and the heads are called "kawkle burrs."

If it is not the herb referred to by Dr. Barnard let me say that I have known of the use of Bidens Frondosa in such cases as he reports, for thirty years and have prescribed an infusion of it with great confidence for the relief of females suffering with difficult micturition in the time of menstruation and from irritation in uterine troubles; in fact in all cases of spasm of the sphincter of the bladder. I have never thought it a "diuretic" and I have never got a favorable result from a tincture. A "handful" of the "burrs" in a half-pint of hot water, "steep," "use freely," is the domestic prescription, and I do likewise.

I enclose a few heads and you will readily recollect the "beggar tick" of the potato field.

Failing with a tincture and not liking or caring to carry a "herb bag," I have not used it in any other season than in the fall or early winter, so that I have no idea whether the "property" resides in all parts of the head or not. H. A. KING, M. D.

QUINCY, Branch Co., Mich.

[Dr. King may be right in his conjecture that the plant alluded to by Dr. Barnard was Bidens frondosa, rather than Xanthium Strumarium. One of the popular names of the "bidens," applied perhaps indifferently to several species, is cuckold or cuckolds (Am. Dispensatory—Cf. "Hobbes").

Cockle-burr is a name applied sometimes to agrimony, but more commonly to xanthium.

From the directions given by Dr. Barnard to steep a dozen burrs in a teacupful of water, it is plain that he did not have reference to agrimony, but he might have had in mind the heads of bidens.—ED. THERAP. GAZ.

Queries and Answers.

"What is Wrong with our Emmenagogues?"

In the September number of the GAZETTE Dr. Chas. Miller asks: "What is wrong with our emmenagogues?" The solution of this question depends upon our knowledge of the cause of normal menstruation. If it has not been fully conceded that menstruation is dependent upon ovulation, it is well known that they are very intimately related, and that menstruation occurs at the time or immediately after the discharge of the ovule. It is true that an ovum might be discharged and impregnated without menstruation taking place; but we do not know that this occurs except during lactation; or more rarely in young women who become pregnant before they menstruate. And it is a well known fact that menstruation does sometimes occur a time or two after impregnation has taken place. Or the menstrual flow may be discharged vicariously. I have known at least one instance of this kind. It occurred in a robust woman in the form of hæmoptysis; the amount of blood ejected was considerable. From this we learn that from habit menstruation may manifest itself in some way after ovulation ceases; or, in other words, after impregnation has taken place. So also may ovulation occur a time or two during the period of lactation before menstruation is re-established. In those rare cases of menstruation after the removal of both ovaries, the function either continues from habit or a portion of one or both ovaries has not been removed, and ovulation continues accompanied by the characteristic menstrual flow. I do not consider the fact that pregnancy has taken place from a coitus that occurred half-way between two menstrual periods as evidence that an ovum had been discharged near that time; or that ova are discharged at any time regardless of the menstrual period. After an ovum has been discharged from the ovary it may be indefinitely detained during its passage to the uterine outlet without losing its vitality; or a spermatozoon may live either in the womb or in the fallopian tubes, or on the surface of the ovary itself, and be ready to perform its office as soon as an ovum is discharged. Now, I believe the fact is that, normally, menstruation does not occur except in connection with ovulation. Accept this and we can understand what is wrong with our emmenagogues. The simple fact is there are no such things. When a woman ceases to menstruate during the child-bearing period, she is either pregnant or there is some departure from the normal condition of things. The ovaries may be at fault, or the patient is plethoric, or anæmic, or has some chronic disease as phthisis. Now, I believe that remedies to restore the former health are the only emmenagogues we have, and it is apparent how uncertain they are. An ovum must mature before normal menstruation can take place. And if a discharge could be brought on with medicines it would only be a hemorrhage caused from congestion and not a true menstrual flow. Suppressed menstruation may be re-established if treated early, and any measures that would bring about this result might be considered as emmenagogues; but aside from these I do not consider we have any such remedies.

C. BARLOW, M. D.

EATON, ILL.

"What is Wrong with Our Emmenagogues?"

In the September number of the THERAPEUTIC GAZETTE I noticed "What is Wrong with Our Emmenagogues?" In reply to the question asked by Dr. C. H. Miller, I can say that the very remedies that he has failed with I have, as a rule, succeeded with, by adding to the ergot and gossypium the tincture or fluid extract of black cohosh.

℞ Fl. ext. ergot.
Fl. ext. gossypii.
Fl. ext. black cohosh, ♏ ʒ j.

M. S. Half a teaspoonful every three hours, and using hot fomentations of hops on the bowels. I cannot tell why they do not act well in Kansas.

JAS. M. HARALSON, M. D.

SLAGLE, MO.

"What is Wrong with Our Emmenagogues?"

In answer to Dr. Charles H. Miller's query, "What is Wrong with Our Emmenagogues?" permit me to say the trouble lies, judging from his article, in that he prescribes too empirically, not giving proper consideration either to agents or quantities indicated in the cases being treated. Understand, I do not say he is given over to empiricism in these cases, but, that such an inference may readily be drawn from his article, *vide* the THERAPEUTICAL GAZETTE, Sept., 1882, p. 334. The following, where indicated, we presume will be found as reliable and safe as any formula we have ever known or tried:

℞ Fl. ext. polygonum punc., ʒ ij.
Ol. sabine.
Ol. rue, ♏ ʒ ss.

Mix thoroughly. Sig. ʒ ss three or four times a day.

Or, when indicated, the following emulsion of savin:

℞ Ol. savin, fl. ext. ʒ j.
Spts. nitrous ether, ʒ iij.
Mucilage of acacia, ʒ j.
Water, ad ʒ vj.

M. Sig. Teaspoonful every two hours.

JOHN T. BOOTH, M. D.

WYOMING, OHIO.

"What is Wrong with our Emmenagogues?"

In reply to the above question asked by Dr. Miller in the September GAZETTE, I would like to ask in what particular cases the remedies failed, for in my hands they have proven themselves to be both prompt and reliable (especially ergot) when such remedies were indicated. Of course in amenorrhœa the emmenagogues must generally be preceded by other remedies, such as the condition of the case may demand, and not infrequently may need surgical treatment. In the various forms of uterine hemorrhages, ergot has proven itself a most valuable drug, nearly always meeting my most sanguine expectations.

GEO. A. HETHERINGTON, M. D., L. M.

ST. JOHN, N. B.

The Therapeutic Gazette

WM. BRODIE, M. D., Editor.

F. E. STEWART, Ph, G., M. D., Associate Editor.

DETROIT, MICH., NOV. 15, 1882.

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Hydrated Oil.

IN this age of wonderful discoveries, no announcement, however, startling and improbable, is pronounced by the wise man incredible until the testimony supporting it is shown to be of imperfect character. It is true that many of the generalizations of science have been so universally confirmed in our enlarged experience that where their absolute truth is called in question the testimony must be of the most direct and conclusive character before we give it much heed, but to prejudge the case, however often this may have been done in the name of science, in the past, is contrary to the fundamental principle of all science. It does not follow that science is open, on the other hand, to any charge of undue credulity.

"Prove all things; hold fast that which is true," is the motto to which it owes all its splendid achievements in the past, and which, to-day, interprets most completely its spirit and aims.

That oil and water are absolutely and uncompromisingly incompatible with one another is a fact so familiar and obvious that it has long ago passed into a proverb. Physicists are ready with explanation of the fact; chemists show us how an apparent reconciliation between the antagonistic substances may be brought about; practical pharmacy does actually effect a blending between the reluctant fluids, yet conscious that microscopic examination will reveal the fact that the old irreconcilable antagonism still exists between the respective molecules.

But the world moves. This feud which has come down from the dark ages is in this enlightened nineteenth century nothing short of a disgrace to their highly respectable families. Let there be an end of their unseemly difference. If they cannot themselves come to an understanding, they must be constrained to it by the force of pressure from without. But who shall take such a gratuitous interest in their private affairs as to undertake so delicate and diffcult a task?

As a question of abstract morality it is clear that parties to this feud are perpetuating to their own disgrace the spirit of the dark ages. But as long as no human interests are involved it cannot be expected that men, who have still so much to reform in their own conduct will engage in a missionary enterprise of such uncertain issue. But let it once appear that in composing this senseless feud, there may at the same time be conferred on humanity a great boon, and there shall not lack self sacrificing souls who shall offer themselves for this mission. And in our decade, lo the opportunity is offered! The scourge of our times is consumption. What home is there that has not been desolated by it! The disease has resisted all manner of treatment, and its victims become every year more numerous. One remedy alone has proved of any value, and unfortunately this belongs to one of the families engaged in that disgraceful, wicked feud. If only cod-liver oil could be brought into an alliance, not fictitious, but real, with its old-time enemy, what might we not expect from the union for afflicted humanity. The tubercle bacillus might continue to flourish, but consumption would be a thing of the past. Inspiring thought—and what was that whisper from Mephistopheles about 4s. 6d a bottle? Well, human motives must be mixed at best; if the grand philanthropic end is reached, what if the suggestion of Mephistopheles is turned to advantage into the bargain. Surely a noble deed becomes none the less noble when it is adequately requited by the gratitude of those who have been benefitted thereby. It is clear that a great discovery is in order, and, in fact, a circular lies before us announcing that it has already been made—and truth compels us to add that the whisper of Mephistopheles has not been unheeded. "Hydroleine (hydrated oil)" thus runs the legend, "the discovery of Prof. H. C. Bartlett, Ph. D., F. C. S., and G. Overend Drewry, M. D., M. R. C. S. and C."

We turn eagerly to the formula which shall reveal the secret of this discovery. "Each dose of two teaspoonsful (sic), equal to 120 drops, contains: pure oil 80 m. (drops), distilled water 35 m., soluble pancreatin 5 grs., soda 1-3 gr., boric acid ¼ gr., hyocholic acid 1-20 gr." Why, that is simply a pancreatic emulsion of cod-liver oil, containing 76 per cent. of the oil. One would have supposed that a hydrated oil was really a combination of water with oil. Common sense in this case was better than a lofty scientific hospitality to truth—credulity some might have called it. The circular really leaves no room for doubt about the nature of the preparation. "The permanence and perfection of the emulsion * * is shown by its retaining its cream-like condition," but one might be misled by such an expression as "the extreme solubility of the hydrated oil," in the same sentence. In fact, the emulsion is at once separated into its constituents by mixing it with ether, and the term solubility is wholly misapplied when used to describe the emul—hydrated oil.

With regard to the value of a pancreatic emulsion of cod-liver oil, we have at present nothing to say. Our attention was drawn to the particular trade-mark preparation, hydroleine, by a recent discussion of its merits in the Kings County Pharmaceutical Society, and while we are ready to accord to the preparation, whatever of merit is its due, as a therapeutic agent, we wish now only to quote from the circular accompanying it some statements which seem to us to require substantiation.

1. The name itself, hydrated oil, and the character of extreme solubility assigned to it, cannot pass unchallenged.

2. It is said that the agreeable character of hydrated oil is conclusively shown by the fact that delicate women and young children take it with avidity. Of course any manufacturer of an emulsion of cod liver oil will make a similar statement, and doubtless in good faith, but he does not see all the wry faces that are made behind the scenes. Mr. De Forrest says that "having tried hydroleine, he found it worse to take and more nauseating than the worst cod liver oil," and we, who have only smelled it, are content to refer the matter to some unbiased person to whom cod liver oil, even the best, is less repulsive than to ourselves.

3. To brain workers of all classes hydrated oil is invaluable, supplying as it does the true nerve food. We are glad to be enlightened thus much in regard to the nutrition of the brain. Yesterday it was the hypophosphites that alone presented appropriate pabulum for the cerebral cells. Possibly to-morrow we shall learn that it is phosphonutritive after all that is the only true brain food.

4. Each bottle in nutritive value exceeds ten times the same bulk of cod liver oil. A statement made with such shows of mathematical exactness ought to admit of ready verification. Grant that we are presented here with a preparation in which the cod liver oil is in the most favorable condition for absorption; it is after all the cod liver oil it contains to which its nutritive value is due. The statement then can be true only if those who make hydroleine are alone possessed of the secret of combining pancreatin, cod liver oil, etc., into a perfect emulsion. We will not so insult those who practice the noble art of legitimate pharmacy as to admit that this can be a fact.

Distortion and Deception in Regard to New Remedies.

WE had occasion in our last issue to refer to the very ingenious but not strictly honest manner in which the advocates of the trade-mark policy, as it applies to medicines, have sought to misdirect convincing arguments especially aimed at the inherent wrongfulness and the unscientific tendency of such policy, to make them do service against legitimate preparations of the newer introductions to the materia medica. Ignominiously defeated, as such advocates have always been when they have essayed a fair and square contest on the broad platform of professional integrity and public welfare, they have latterly been resorting to other tactics—the guerrilla tactics of misrepresentation and deceit. Unable to defend their position against enlightened professional sentiment, they have sought to divert attention from their nostrums by seeking to bring new remedies into disrepute. They have attacked these from two sides: First, as already intimated, they have adroitly endeavored to associate them in the minds of the profession with copyrighted and proprietary compounds, with the object of placing them in the line of the fire directed at the latter, hoping, too, by so doing to render less effective the specific attack on their nostrums. By thus endeavoring to associate these preparations, which have nothing whatever in common, they also seek to defend their transgression of the fundamental principles of ethics, by an appropriation of the arguments which are advanced in support of improving the materia medica by the introduction of agents not heretofore generally employed.

The other line of attack, and that to which we would particularly refer at this time, is the effort to bring new remedies into disrepute by placing inferior and false preparations of them in the market. It is a fact that many such preparations are now to be found in the prescription cases of the drug-stores throughout the country. Doubtless in some instances the fact is traceable rather to ignorance than deliberate design on the part of the manufacturer. In the matter of the newer drugs, the guides to the selection of standard samples of them have not been enunciated, or have, at best, been indefinitely laid down in the text-books of pharmacy. In the absence of such guides, the selection of the proper species and quality requires an amount of care and a familiarity with each particular drug, acquired only through experience in its handling, which the general manufacturer is not expected to attain to. He simply buys on faith in the representations of the drug gatherers, a class who are, as a rule, not sufficiently distinguished either for their botanical knowledge or for their integrity, to justify such faith. As in the case of the older drugs, so also in the newer, they have their peculiarities from a strictly pharmaceutical standpoint, —peculiarities which can be determined only through experimentation, the results of which have not been generally recorded in the books.

To assign ignorance and credulousness as the sole cause of the inferiority and falsity above alluded to, would be an unwarrantable exercise of charity. It is in evidence that a deliberate effort has been made by nostrum vendors to prejudice physicians against new drugs by placing in their hands what purport to be preparations of them which are known by their manufacturers to be inferior and false. This has been done to retaliate on such manufacturers particularly interested in the preparation of new remedies, who have also been active in the defence of pharmacy as a profession, and who have been obliged in such defense to denounce as unethical, unscientific and inhumane all attempts at proprietorship and secrecy in the manufacture of pharmaceutical compounds.

The practical deduction from the above is that, before condemning a new remedy the physician should satisfy himself that the preparation employed has not been put on the market by a firm engaged also in the manufacture and sale of proprietary or copyrighted medicines.

The Doctor and the Druggist.

AT the annual meeting of the Illinois Pharmaceutical Association on the 11th ult., the occasion was enlivened by the usual banquet, at which the usual toasts were proposed and responded to with more than the usual spontaneity and point. We were particularly struck with the reported response by the veteran, Dr. N. S. Davis, to the toast "The Medical Profession." If there is one characteristic of Dr. Davis's speeches, impromptu or otherwise, it is the absence from them of the commonplace. He has the faculty not only of saying a thing well, but of the opportune selection of the line of his remarks. On the occasion referred to he made a ringing appeal for the legitimate in medicine and pharmacy, and declared himself, with the whole force of his nature, against the illegitimacy with which the trade element has of late years been endeavoring to contaminate purely professional methods. The following abstract of his remarks is from the Druggist, which journal gave a display of its enterprise by publishing a daily edition during the session of the association:

It was no more important to make a prescription right than it was to have it compounded right and put up correctly, and it was one of the greatest objects of the physician to feel that he could thoroughly rely in every case upon the skill of the men who dispensed prescriptions. The relations between druggist and physician were perfectly clear. It was his duty to prescribe for his patient exactly such medicines, or such combination of medicines, in just such proportions as that individual patient needs; and it was simply the druggist's duty to keep and dispense pure medicines of standard strength and reliability; and it was his business to judge of those medicines, and see that they kept pure drugs. He held the druggists responsible for filling his prescriptions with pure medicines of standard strength. It was for them to exercise their science and skill in determining what were pure drugs, and in determining the standard strength of these drugs. It was a part of their business to see what the active principles of drugs were, and to separate them from the crude materials and put them in the best possible shape for use. He assumed that they kept pure drugs of standard quality, and when he ordered them in his prescriptions he did not order a ready-made compound of somebody's manufacture, but just the proportion of ingredients that each individual needs. The relations between physician and druggist, therefore, were clear. Unfortunately, there were drug manufacturers that were continually endeavoring to assume the duties of doctors, and to make up prescriptions, and to put in this elixir and that compound, and assume to say how much there should be, and to prescribe the compositions thoughtlessly in a lump; and some doctors, when they wanted to prescribe a tonic, would nine times out of ten prescribe elixir of salisaya bark and strychnine, without thinking whether a large proportion of iron would be better, or whether there should be of strychnine none at all. He had always discountenanced traveling agents, who went around with neat samples put up in very nice bottles, and who could hardly be persuaded to take the hint that *a respectable physician sends his prescriptions to a regular druggist to fill, and never prescribes proprietary medicines.* He held that no physician should ever prescribe them, and that *no druggist should have any patent or proprietorship in any drug that was of value to the human race.* It should be the common property of the suffering race of humanity. He congratulated the druggists of Illinois on the formation of this association, and upon having present at their banquet their wives and sweethearts, and upon banishing from it that which the good book says is a "mocker." He hoped the time would come when neither wine nor strong drink would be found anywhere among people who made a profession of dealing with human health and happiness.

Specifying the Manufacturer's Name in Prescriptions.

OUR prophetic eye can discern faint streaks of the dawn of the day when it will be quite superfluous for pharmacists to place their brands upon or attach their names to their products. When that day has fully dawned no preparation will be placed on the market which is not fully up to the standard, and it will be misdemeanor for a manufacturer to deviate in the slightest degree from such standard. In that day it will be held to be one of the highest duties of the legislator to protect the public against all deception and fraud in the matter of medicines. That day, however, will be the herald of millennium, and while we earnestly labor for it it behooves us to deport ourselves, pending its arrival, as existing circumstances demand. The facts are that at present not all preparations in the market are up to the recognized standards of quality, and that it is necessary for the prescriber to specify the name of the manufacturer of particular medicines. The necessity of such specification is much to be regretted, but it none the less exists, and is particularly apparent in the case of the preparations of newer introductions to the materia medica. The admission of this necessity does not, however, imply any concession to the ruinous doctrine of copyrights on medicines. The effect of the latter is to create a monopoly which prevents competition in either the quality or price of the preparation, while the former stimulates competition in both of these regards. It is the only legitimate protection which a pharmacist may ask.

So generally has the necessity of the specification of the name of the manufacturer of a medicinal agent become recognized under the existing status of affairs, that when any such agent is put on the market not bearing the manufacturer's name the fact is sufficient to arouse suspicion. There have, for instance, recently been placed on the market certain filled capsules, the packages containing which give no hint as to whom their manufacturers are, although their origin has been traced to a firm who also issues filled capsules bearing their name. Why, we would ask, should a firm thus place two preparations, ostensibly similar, on the market, attaching its name to one and making a studious effort to conceal its connection with the other? We have in the fact that the latter are advertised as much cheaper than the other a very probable explanation of this singular procedure. This reduction in price is secured at the expense of the quality of the goods, an expense which the firm cannot afford to have saddled on its name. Such conduct is positively infamous and merits the righteous condemnation of all true physicians and respectable druggists. This debasement of pharmacy to the level of the grocery business calls for the earnest protest of the professions, through whom the mischief is designed to be perpetrated on the public.

Our City Medical Societies.

THE seventh annual meeting of the Detroit Medical and Library Association was held at their rooms at the corner of Lafayette avenue and Shelby street, Monday evening, Oct. 2, 1882. The reports of the Treasurer, Dr. M. K. Ross, and the Secretary, Dr. Willard Chaney, showed the society to be in a prosperous condition, with a surplus in the treasury and a constantly increasing membership.

On motion of Dr. Carstens the by-laws were so amended as to make the Secretaryship an annual elective office without compensation, and on Dr. Carrier's motion the Secretary was thanked for his donation to the society of $100 in the past two years by his refusing to accept his annual salary.

Dr. Edward Lauderdale was elected President; Dr. Willard Chaney, Secretary, and Dr. Hugo Erichson, Treasurer.

We are indebted to the Detroit Free Press for the report of the Wayne County Medical Society's annual proceedings: The Wayne County Medical Society held its seventh annual meeting at the office of the President, Dr. Wm. Brodie, corner of Lafayette avenue and Wayne street, Thursday evening, Oct. 5th, 1882.

Dr. Brodie, as president of the society, read his annual report. In it he states that no serious misfortue has befallen any of its members, or their families during the past year. No great discoveries have been made in medicine, except that of Koch, should that be sustained. The microscope is demonstrating the fact that what we eat and what we drink is living material, whether vegetable or animal. The fact that variola can be controlled, and even blotted out, by effectual vaccination, has been demonstrated, and could the same be said of diphtheria, scarlet fever, and measles, the millenium would be near at hand for childhood's woes.

In medical education there has not been that progress which should have been expected. The rivalry of the schools, that in ordinary business would have resulted in the production of a better article, has had the contrary effect of sending out a cheaper one—a result to be deprecated, by both the profession and the public. This condition can only be remedied by the state assuming the licensing power and making qualification the standard, irrespective of the school or creed or system of practice. Illinois and West Virginia have taken the lead in this matter and a united action of the profession with the next Legislature might result in something similar in Michigan. We confess that sumptuary or class legislation is antagonistic to our ideas of the proper application of the powers of the State as applied to the individual, but in this matter of enacting a standard which shall be attained to by all who seek to practice medicine and surgery, we would agree to the greatest good for the greatest number. We trust that one more effort will be made by the medical profession to bring about so desirable an end.

There are other matters of interest in which the profession should be united, and it is only by union that success can be achieved. I refer (1) to the giving of expert testimony in the courts of law. All are agreed that the opinion of the expert is his personal property, and is entirely outside of what he may think as to facts. Both the State and Federal constitutions forbid the taking of private property for public use without due compensation. Some of the judges recognize this right, but it is so far from being general that we think that the State should, by enactment of law, guarantee this as an unquestionable right, to be waived only by the physician himself.

The second relates to the department of hygiene. This field has thus far been cultivated by the medical profession without fee or reward. It seems as though the time had come when the professional sanitarian should receive compensation for his time and skill. All others are paid for their labor, and why not the physician who above all furnishes the brains and directs how the work should be done?

The secretary's report showed that during the past year twelve meetings were held with an average attendance of eleven members, and that eight papers were read.

The treasurer's report showed the society to be in a good financial condition.

The election of officers for the ensuing year resulted as follows:

President—Dr. Wm. Brodie.

Vice-President—Dr. George R. Richards.

Secretary—Dr. W. H. Rouse.

Treasurer—Dr. E. S. Snow, of Dearborn.

Executive Committee—Drs. Edward Lichty, O. P. Eaton, Augustus Kaiser, John E. Clark and C. J. Lundy.

Several of the members related interesting cases coming under their observation.

After adjournment the society was invited to a lunch by Dr. Brodie. That gentleman was agreeably surprised by being called up by Dr. Peter Klein, who, in a happy address, presented him with a handsome silver soup tureen, appropriately inscribed, in recognition of his faithful services during the five years he has been at the head of the society, coupled with the best wishes of the members for his future prosperity.

Dr. Brodie returned his sincere thanks at the manifestation of the esteem entertained for him, and accepted the gift with a feeling response. A pleasant hour of social intercourse followed.

Ourselves.

THIS journal, now entering upon the close of the sixth year of its existence, has, we think we may declare without laying ourselves open to any charge of egotism, taken its stand among the leading medical journals of this country. Certainly if the size of its subscription list is to enter as a factor in determining its position, it is first among the leading journals. The GAZETTE as it stands to-day is the result of organic growth. None are more sensible than we of the manner in which it has been handicapped in its struggle for position. Being the continuation of a journal to which, through laborious effort on the part of enemies, the stigma of "advertising sheet," was sought to be fixed, its present editorial manage-

ment has been conscious of the load it has, in consequence, had to hear. We flatter ourselves, however, that our efforts to issue such a journal as this has purported to be during the past three years, have for some time been bearing fruit, and that in its present form and under its present management it has very effectually lived down its inherited stigma, referred to. We are admonished by our publisher, however that there are possibly some among our readers who still regard the GAZETTE as, in a measure at least, published for other than strictly scientific ends. These are the few who, despite repeated intimations of arrearage on their subscription account, persistently neglect to pay up. To such we would state that it is our honest effort give them wholesome medical reading, while, through the enterprise of our publisher, and rendered possible only by the immense subscription list, the amount given for the money is unequalled in medical literature. Certainly if the GAZETTE were designed to be in any sense an "advertising sheet," it could achieve its end in a much more economical and direct way than in that which it follows. We would remind such of our readers as seem to entertain a wrong conception of our aims and purposes, that while they continue to take the GAZETTE they are expected to pay for it, and trust that this hint may be sufficient to induce the friends from whom who should be loath to part company, to send in the amounts of their arrearages. We are determined to do our share in catering to their professional needs, but a labor of love is apt to grow irksome when not requited by the accustomed substantial recognition of its monetary value. We trust that no such cause for irksomeness will greet us on the opening of the volume for 1883.

Prohibition versus Morphomania.

ON page 434 of this number of the GAZETTE we give an extract from the American Pharmacist with reference to the tendency which the liquor prohibition laws have towards creating a demand for and consumption of opium. We should be pleased to hear from our readers upon this point, and will request brief communications from those who have any experience or opinions to offer in the premises.

Finis.

WE learn that the name of Dr. Horatio R. Bigelow has been dropped from the proposed System of Gynæcology to be issued by an eastern publisher. It is supposed that this action is the immediate result of Dr. Bigelow's unprofessional advocacy of the claims of the trade-mark fallacy as evinced in his article in the New England Medical Monthly of February last. It is to be hoped that Dr. Bigelow and other similar aspirants for notoriety will learn a lesson by his experience, and not attempt again to gain repute by the advocacy of unprofessional doctrines.

Abstracts.

Erythroxylon Coca; Its Physiological Effect, and Especially its Effect on the Excretion of Urea by the Kidneys.*

Erythroxylon coca is a shrub growing in various countries of South America. The leaf is the part of the shrub used medicinally, or perhaps it were better at the present time to say, physiologically. The leaf is rather oval in shape, and about two inches in length. It has a bitter, pungent taste when green. The natives collect the leaves and dry them carefully in the sun. A large amount is produced annually. The dried leaves taste like tea.

Although this is a comparatively new drug to us, yet its history shows that it has been in use among the aborigines of South America for many centuries, and they appear to have regarded it with very high favor. They attributed a divine origin to it, and this fact led the Spaniards, after their conquest of the natives, to prohibit its use; but later their religious scruples gave way, and this seems to bear considerable testimony to the value of the drug, for the cause of the change in their views was due to the fact that they found that the natives could do more and better work with, than without, coca. Their method of taking the drug was to chew the leaves mixed with a little ashes or lime.

The principal constituents of the coca leaf are first, coca tannic acid, a peculiar tannin, reacting green with iron salts; second, cocaina, a fixed crystallizable alkaloid of a bitter taste, and producing numbness of the tongue; third, a volatile alkaloid, hygrina, which was obtained by Lossen as a thick, pale-yellow oil of a burning taste and alkaline reaction.

In regard to the physiological effect of coca it seems to be pretty well determined in case of animals. Briefly stated, in large doses it causes tetanic convulsions; in medium doses it diminishes and then extinguishes sensibility; in small doses it causes hyperæsthesia, dilatation of the pupils, and diminution of movement, apparently from loss of coördination. The action of the heart is first increased, then diminished. In regard to man, results are not nearly as definite. Until very recently the amount of the drug imported has been small, and the quality generally not by any means the best. The only point upon which experimenters seem agreed is that it enables the user to perform labor with less fatigue than he otherwise could. Christison observed that it entirely prevented fatigue after long-continued walking. The weight of evidence seems to show that habitual excessive use of the drug is deleterious to mind and body.

Experimenters are not agreed as to the effect of coca on the excretion of urea. Ott found that the amount of urea in the urine was diminished in its use, while Gazeau found that it was increased. On account of this diversity of opinion it seemed that it would be interesting, and possibly of some value, to undertake a series of experiments with coca, paying particular attention to this point.

* Graduation Thesis.

Before speaking of its action on the excretion of urea I wish to allude briefly to its effects in other ways. During my experiments I used coca leaves, and fluid extract of coca. Shortly after taking the drug I felt slight weakness in the legs, passing away gradually. My spirits were more buoyant, and walking (which was the form of exercise I took mostly) seemed easier. It seemed to produce a sort of dream-like condition, and I would walk almost automatically at times. I always noticed dilatation of the pupils. I felt fresher in the evening after a long walk when I had taken coca than when I had not, and often noticed a tendency to wakefulness in the former case on going to bed. On the whole, I think that I obtained more decided effects from the fluid extracts than from the leaves, and the former are certainly more convenient to take.

I computed the amount of urea by the hypobromite of sodium method. The solution of hypobromite of sodium was made by dissolving 50 grammes of caustic soda in 125 cc. of water and when cold adding 12 cc. of bromine. This solution, added to urine, decomposes the urea, setting free nitrogen. The apparatus used was first a large test tube having two bulbs blown at the end; into the mouth of this tube fitted a rubber stopper having two holes through it; through one of them ran a glass tube of small size which was connected by rubber tubing to a 50 cc. burette inverted in a 250 cc. urine jar nearly full of water; a solid glass rod passed through the second hole in the stopper. Two cc. of the urine to be tested were put into one bulb of the glass tube, and 5 or 6 cc. of the hypobromite of sodium solution into the other, and then the rubber stopper connected with the burette as above stated was crowded in tightly. The connection was then complete. The water in the burette was brought to 0 cc. by pushing in or drawing out the glass rod in the rubber stopper. The urine and hypobromite of sodium were then allowed to mix, and after effervescence ceased the number of cc. of water in the burette displaced by the nitrogen generated was noted. The temperature of the water was then taken, and the amount of urea in the whole quantity of urine test was estimated by table 1.

TABLE I.

For Temperature of 15° C.		For Temperature of 20° C.	
Amount of water (in cc.) displaced by nitrogen generated from 2 cc. urine.	Corresponding amount of urea (in grammes) per 1000 cc. of urine.	Amount of water (in cc. displaced by nitrogen generated from 2 cc. urine.	Corresponding amount of urea (in grammes) per 1000 cc. of urine.
1	1.281	1	1.261
2	2.562	2	2.522
3	3.842	3	3.783
4	5.124	4	5.044
5	6.404	5	6.305
6	7.686	6	7.566
7	8.967	7	8.827
8	10.248	8	10.088
9	11.529	9	11.349
10	12.810	10	12.610
11	14.091	11	13.871
12	15.372	12	15.132
13	16.653	13	16.393
14	17.934	14	17.654
15	19.215	15	18.915
16	20.496	16	20.176
17	21.777	17	21.437
18	23.058	18	22.698
19	24.339	19	23.959
20	25.620	20	25.220
21	26.901	21	26.481
22	28.182	22	27.742
23	29.463	23	29.003
24	30.744	24	30.264
25	32.025	25	31.525
26	33.306	26	32.786
27	34.587	27	34.047
28	35.868	28	35.308
29	37.149	29	36.569
30	38.430	30	37.830

I first tried the coca towards the end of the summer of 1881. My diet was the same every day during the continuation of the experiments, and consisted of bread, milk, roast beef, and coffee. I made but few trials at that time. The mode employed was to do a certain kind and amount of work in a definite time one day without, and another day with, coca. I think I did not take enough of the leaves (which were not first quality, I suspect) at a dose. I did not experience much effect from the drug. However, as I noted the results I will subjoin them:—

TABLE II.

(1.) WITH COCA.

Hours.	Amount of Urine.	Urea.
4	265 cc.	4.4 grms.
24	735	20.00
12	680	8.65
12	540	9.42
6	345	5.99
	2565 cc.	48.46 grms.

(2.) WITHOUT COCA.

Hours.	Amount of Urine.	Urea.
4	260 cc.	4.64 grms.
24	675	22.44
12	700	9.02
12	400	9.04
6	340	5.38
	2375 cc.	50.88 grms.

Leaving out of account the two days when I estimated the urea for the whole day, the results almost exactly balance. I think the coca had no effect to speak of, and only put in this table to show the average amount of urea passed.

The second series of experiments began about the middle of October, 1881, and lasted for nearly two months. The form of exercise taken was walking. The same route was walked over in the same time, first without and then with coca. Through the kindness of Prof. R. T. Edes, I obtained the leaves direct from Parke, Davis & Co., of Detroit, Mich. They were much stronger and fresher than the leaves I had been using previously. I took a larger quantity (twenty to thirty grammes) at a dose than before, and felt the effects heretofore described. I took these walks on Saturday afternoons, with the exception of the two twenty-two-mile walks. These I took from 10.30 A. M. to 5 P. M., eating no food during the walks. It

gradually grew colder, and the effect of this is shown in the gradually increasing amount of urea. This is very marked in the last two walks that I took in this series, one being with coca and the other without.

The walks were each eleven miles, and occupied only three hours, but the excretion of urea was considerably above my average. The thermometer stood at the freezing point on both these walks. I give the results in table 3.

TABLE III.

(1.) WITH COCA.

Hours.	Miles.	Amount of Urine.	Amount of Urea.
4	16	180 cc.	3.54 grammes.
6.5	22	300	5.15
3.5	13	350	3.80
3	11	234	4.25
3	11	255	5.20
20	73	1319 cc.	21.94 grammes.

(2.) WITHOUT COCA.

Hours.	Miles.	Amount of Urine.	Amount of Urea.
4	16	420 cc.	5.52 grammes.
6.5	22	315	6.73
3.5	13	292	4.10
3	11	220	4.62
3	11	286	5.55
20	73	1533 cc.	26 52 grammes.

Computing from this table, we find that with coca the excretion of urea per mile is .300 gramme, per hour is 1.097 grammes, per 100 cc. of urine is 1.66 grammes; without coca the excretion of urea per mile is .363 gramme, per hour is 1.326 grammes, per 100 cc. of urine is 1.73 grammes.

Before proceeding to draw any conclusions, I will give the results of the third series of my experiments. This series extended from March 14 to May 1, 1882:

TABLE IV.

(1.) WITH COCA.

Hours.	Miles.	Amount of Urine.	Amount of Urea.
2.75	11	152 cc.	2.85 grammes.
2.5	10	104	2.75
2.5	10	146	2.75
2.5	10	120	2.40
2.5	10	230	3.80
2.5	10	212	3.46
2.5	10	166	2.90
3	8	210	3.49
3	10	210	3.83
3	12	210	4.10
3	14	200	4.74
2.5	10	186	3.34
2.5	10	170	2.67
3.5	15	250	4.99
3.5	15	256	4.56
4	16	310	5.25
9	31	272	5.50
2.5	10	354	3.12
57.25	222	3758 cc.	66.50 grammes.

(2.) WITHOUT COCA.

Hours.	Miles.	Amount of Urine.	Amount of Urea.
2.5	10	160 cc.	3.70 grammes.
2.5	10	220	3.30
2.5	10	135	2.86
2.5	10	110	2.00
2.5	10	155	3.10
2.5	10	218	3.00
3	8	272	4.16
3	10	250	4.45
3	12	232	4.45
2.5	10	260	4.39
4	16	460	5.59
2	8	90	2.27
3.5	15	310	5 03
3	10	230	3.80
4	16	285	5.13
3	10	185	3.40
2.5	10	258	3.31
48.5	185	3850 cc.	63.94 grammes.

Comparing (1) and (2) we find that 222 miles walked while under the influence of coca caused an expenditure of 66.5 grammes, while 185 miles walked without coca caused an expenditure of 63.94 grammes of urea. Computing from these figures we find that with coca the excretion of urea per mile is .299 gramme, per hour is 1.161 grammes, and per 100 cc. of urine is 1.769 grammes, while without coca the excretion of urea per mile is .345 gramme, per hour is 1.318 grammes, and per 100 cc. of urine is 1.660 grammes.

If we compare these results with those obtained in the same manner from table 3 the almost exact correspondence of the excretion of urea per mile with coca in both series is, to say the least, quite striking, in table 3 being .299 gramme, and in table 4, 300 gramme. The excretion per mile without coca corresponds pretty closely, and the same may be said of the excretion per hour without coca. With regard to the excretion per hour with coca, table 4 exceeds table 3 by .064 gramme, and the excretion per 100 cc. of urine in table 4 is diametrically opposed to that in table 3.

What conclusions, then, are we justified in drawing from the figures before us? That less urea was excreted when coca was used than when it was not used is undeniable, but that this decrease is due to the effect of coca seems to be somewhat questionable. Looking at tables 3 and 4, we see that more urine is passed when no coca is used than when it is used. This is especially noticeable in table 4, where the total amount of urine passed in 48.50 hours' walking, without coca, exceeds by 92 cc. the amount passed in 57.25 hours' walking with coca. Increase in the amount of urine causes the amount of urea to increase absolutely, and diminish relatively. Coca does not seem to prevent this to any great extent, though it does somewhat, I think. When walks were taken on cold, damp days, both the amount of urine and the urea were increased, but generally less increased when coca was taken than when it was not. Atmospheric conditions seem to stand in the way of coming to any definite conclusion, yet some of my walks, with and without coca, taken under atmospheric conditions as nearly alike as was possible, lead me to believe that coca does have an effect on the urea excretion, and, furthermore, the very close correspondence of the excretion of urea per mile with coca in tables 3 and 4, strengthens

this belief. I am at a loss to explain the cause of the excess of urine when not using coca. I am not aware that the days when I took walks without coca were to any extent colder or damper than other days when I used coca. Possibly coca has some diaphoretic effect, but I never noticed any, or perhaps it acts upon the kidneys in such a way as to diminish the excretion of water.

There is one thing pretty certain to my mind, and that is that coca is an excellent thing, in every respect, for a long walk. On Saturday, April 29, I took the thirty-one-mile walk recorded in table 4. It took me from 9 A. M. to 6 P. M. I did not hurry at all, and walked the whole with perfect ease. I had no desire for food during all the time, and could easily have gotten along without any supper. In the evening I walked four or five miles more. I took thirty-two cc. of fluid extract of coca in two doses, and chewed about twenty grammes of leaves for this walk, and to the influence of the coca I attribute the ease with which it was accompanied. Now, as regards the urea in this case. The amount of urine was very small (272 cc.), yet at that rate over 700 cc. would be possed in twenty-four hours, an amount not much less (and even larger) than I passed at times during twenty-four hours while experimenting last August. Yet the amount of urea then was at least 20 grammes for the 24 hours, while at the rate at which it was excreted during my nine hours' walk it would have amounted to less than 14 grammes in 24 hours. I know of no cause for such a marked diminution unless it was the coca. Surely going without dinner could not cause it. I regret that there have been no more opportunities for these long walks. I am convinced that excellent results would follow the trial of it in this way.

My experiments with coca have not come to as much as I had hoped; still I have had the satisfaction of demonstrating to myself the practical value of coca. It has had a good effect upon me both mentally and physically. It has almost always produced exhilaration, and without exception has prevented fatigue. Hence, in conclusion, I will say that I am pretty well convinced, that in my own case at least, the ease with which walking has been accomplished by the aid of coca is attributable to the united action of two effects of coca. One of these effects is stimulation of the nervous system, the other is the retardation in some way of the process of metamorphosis, so that work is done with a less expenditure of force with than without coca. Although no positive conclusion has been arrived at in this paper, yet the results of the few experiments I have undertaken seem to point to the usefulness of coca, and hold forth inducements to prosecute the investigation. —Atherton P. Mason, M. D., in *Boston Medical and Surgical Journal*, Sept., 1882.

Nature and Treatment of Asthma.

Dr. Wm. M. Welsh treats of this subject in the Philadelphia Medical Bulletin for August. He says that the majority of authors now believe that the phenomena of asthma are dependent upon spastic contraction of the muscles of the bronchial tubes. The weight of authority favors this theory. Since death from asthma is rare it is not surprising that many vague and erroneous notions should be entertained with regard to its essential nature, owing to the few opportunities for post mortem examination. Even in asthmatic patients who have died from some other disease there is usually found no appreciable morbid change in the lungs, or indeed anywhere else, to account for the asthmatic phenomena.

The writer claims that asthma is peculiarly nervous in its origin, and, therefore, the pathological condition known by that name must be sought for in the nervous system. Irritation of the vagus nerve, either at its origin or along its course, will occasion bronchial asthma. Periodic excitement of this nerve, or of some of its fibres, produced, either directly or in a reflex manner, by irritation of various organs, is believed to be a common cause. According to some authors direct irritation of the vagus, or some of its branches, may sometimes be occasioned by swollen bronchial or tracheo-bronchial glands, which, by occasionally increased tumefaction, produce paroxysms of asthma. This is thought to be the explanation of the etiology of the disease when it occurs in children after measles and whooping cough. Irritation of the bronchial branches of the vagus nerve, giving rise to asthma, may be produced by the action of an irritant in the schneiderian membrane, the skin, the circulatory and abdominal organs of such reflex nature, as the asthma which is produced by the inhalation of ipecacuanha powder, the odor of dried hay, fodder, rye, pollen, and the like. So also cold water suddenly applied to the feet has been known to excite the bronchial spasm. Indeed one of the peculiarities of asthma is that the paroxysms may be induced through the action of an irritant on remote parts. Salter speaks of a case "in which the patient could regulate his asthma entirely by the condition of his bowels. They were, as a rule, relieved every evening. If the customary relief took place, and he retired to bed with an empty rectum, he awoke the next morning well; but if he neglected to relieve his bowels, or his efforts to do so were abortive, he was quite sure to be awoke towards morning by his asthma."

The cases of hysterical asthma are of analogous nature, the paroxysms being often preceded by well marked symptoms of uterine displacement or irritation. Errors of diet are often provocative of the attack, particularly in persons who are at all predisposed to the disease. Salter says: "* * * * Therapeutically, the full appreciation of this fact is most important; more is to be done for our patients on the side of the stomach than in any other direction. An observant and thoughtful physician once said to me that he considered dietetic treatment the only treatment of asthma."

This author alludes to the theory of Bree, according to which all the spasmodic muscular contractions in asthma are but efforts to get rid of irritating material present in the bronchi, this irritating material being mucus, which is finally expelled, and then the paroxysms subside. But it is his opinion that the presence of mucus must be regarded as having a post rather than a propter relation to the disease. The first appearance of

moist râles and loose cough is looked upon as the harbinger of relief, and it must be remembered that the bronchial spasm subsides coincidently with the first appearance of expectoration, instead of continuing until all the mucus has been expelled.

As to the origin of the sputum, which is often expectorated in very large quantity, the author says that not only does clinical experience lead to the assumption that a severe congestion of the mucous membrane of the bronchi takes place during the paroxysm, but that Störck has even demonstrated the correctness of this view by tracheoscopic examination, by which he found the mucous membrane of the trachea and larger bronchi intensely congested during the attack. If this is true of the larger, it is reasonable to infer that this hyperæmia exists even to a greater degree in the smaller bronchi. This condition would evidently give rise to the catarrhal symptoms; and it cannot be wondered at that long continued and frequently recurring attacks of asthma should lead to chronic bronchial catarrh, a condition so often observed in confirmed asthmatics:

Concerning the character of the sputum, it is of a grayish-white color, generally frothy and viscid, and contains a mixture of granular and ordinary mucous cells, cylindrical and ciliary epithelium, and sometimes pus cells and particles of blood, all united together in dense and elastic clumps. Leyden, in 1871, discovered in the sputum more or less abundant layers of fine pointed octahedra crystals, the nature of which he was not able to determine, but thought it probable that they were composed of a crystallized substance analogous to mucine. As to the relation of this symptom to asthma, Leyden has advanced the theory that these fine pointed crystals irritate the peripheral terminations of the vagus nerve, and thus through reflex action occasion bronchial spasm. But Leyden's attempts to prove this theory experimentally have not as yet succeeded.

As previously stated, the essential condition in asthma is believed to be spastic contraction of the muscles of the smaller bronchial tubes. This proposition is now so generally accepted that it is, perhaps, unnecessary to set about proving it. I will, however, so far trespass upon the time of the reader as to refer to two or three clinical observations in the disease which seem to me quite sufficient to establish the theory beyond all question. First, we have dyspnœa of an intense and agonizing character suddenly appearing in a person while in a state of apparently perfect health, and in a short time disappearing equally suddenly, without leaving behind any marks of disease. Evidently dyspnœa of this nature points to temporary stricture somewhere in the respiratory organs; and what would more probably explain the nature of this stricture than muscular spasm?

Then, again, we have, besides dyspnœa, well-marked, even shrill sibilant râles, and prolonged expiration, both of which are very prominent symptoms in asthma. Now, we know that when air is forced through hollow tubes of even calibre, no musical sound is produced, but if they are narrowed at certain points, the air in them is thrown into vibration and they become musical instruments. Likewise, the musical sounds observed in the chest in asthma are doubtless the result of narrowing of the bronchial tubes at certain points. And if these sounds appear and disappear with the paroxysm, what would better explain this circumstance than muscular contraction and relaxation of certain portions of these tubes?

Prolonged and forced expiration has been referred to as a prominent symptom in asthma; this symptom also indicates constriction of the medium sized and smaller bronchi. According to Biermer, the inspiratory force acts antagonistically to the constricted bronchial muscles, and forces the air through them into the alveoli; but despite the efforts of all the expiratory forces, the air escapes but slowly and incompletely; hence follows insufficient change of air in the lungs, and distension, which, secondarily, give rise to a sensation of want of air, and to reflex straining of the expiratory forces.

While these and other clinical facts evidently justify the belief that the phenomena of asthma are dependent upon bronchial spasm, yet the question arises, What is the cause of the bronchial spasm? We may say truly that it is often the result of some stimulus applied to the mucous membrane of the bronchial tubes, or to some remote part operating on the bronchial muscles through the intervention of the excito-motor system, but the same stimulus applied in the same way will not produce asthma where the tendency to the disease does not exist. Agents which act in this way can only be regarded as co-operative factors in the production of the paroxysm; before they can excite asthma there must be present a certain predisposition to the disease, a certain unknown something. We are therefore obliged to confess that the ultimate cause of asthma is as yet unknown. All that we can safely affirm is that the proximate condition is muscular contraction, and that the primary disease consists of some peculiar unknown neurosis.

The author divides the treatment of asthma into first, the treatment of the paroxysm; second, the treatment of the interval. The paroxysm, however, constitutes the principal feature of asthma, and it is to the amelioration of this condition that the treatment is chiefly directed. He is of the opinion that the relief afforded to the paroxysm by the use of certain drugs, whose action is well known, furnishes convincing proof of the correctness of the spasm theory. Reference is made to that class of drugs, however, as nauseants or depressants. As soon as their peculiar effect is produced, the spasm relaxes and the dyspnœa ceases. They act in asthma just as they do in strangulated hernia, viz.: by causing muscular relaxation. He recommends ipecacuanha as the safest, and, as it is very manageable, the best, of these agents. In order to be of the most service it should be given in a positive dose—say twenty grains of the powder—at the very approach of the paroxysm. Opium has its advocates, but is condemned by the author who cites Salter to support his opinion. Twenty to forty grains of chloral hydrate at one dose has been followed with very satisfactory results in his hands. Chloroform and ether have been highly recommended, but the author has not had courage to try them. Nitrite of amyl has had very favorable results attributed to it, but in the case in which it was used by the author he is of the opinion that it aggravated the dyspnœa.

The inhalation of the fumes of burning nitre or

stramonium leaves is highly recommended. More preferable is a mixture of the two made after the following formula:

℞ Stramonii foliarum, ʒ x.
Potassæ nitratis, ʒ v.
Seminis fœniculi, ʒ ss.
Sacchari, ʒ ii.

M.

The stramonium leaves and the fennel seeds should be ground to a powder, not very fine, and passed through a sieve so as to get rid of the stems and coarser fragments. All the ingredients should then be rubbed together in a mortar, without producing a very fine powder. The mode of using the material is to place a small portion of the powder on a dish and ignite it with a match. It should burn slowly and somewhat irregularly, emitting fumes as it burns, which, of course, are to be inhaled. The fumes may be conducted to the mouth of the patient by means of a paper hood placed over his head.

This remedy, if not more efficacious, is certainly more agreeable to the patient and more convenient than the inhalation of the fumes of burning nitre-paper, or the smoking of stramonium. The combustion of paper is always attended by a disagreeable odor, and the fumes, particularly if the paper is not very carefully selected, are apt to be too carbonaceous for inhalation. During an asthmatic paroxysm, when the patient is suffering from severe dyspnœa, smoking is found to be very difficult; hence stramonium cigarettes cannot be very conveniently used. Therefore, the advantages of this remedy are, (1) That it possesses the combined value of nitre and stramonium; (2) that it is free from the disagreeable odor and irritative smoke of burning paper; and (3) that it can be used without any effort on the part of the patient.

There is no medicinal remedy known that can be depended upon to prevent the recurrence of the paroxysms. As asthmatics are generally dyspeptics, and as the paroxysms are frequently provoked by indigestion, there is perhaps no better prophylactic treatment, with the exception of change of residence, than that which is regiminal. The excito-motory action being exalted by sleep, it is important to an asthmatic person that digestion should be over and the stomach empty before going to bed. With many persons, carelessness in this particular is sure to be followed by a nocturnal paroxysm. As the day advances digestion becomes slower and less energetic; breakfast is therefore the meal at which the asthmatic may with safety eat most heartily, and he should take the opportunity at this meal, if at all, of gratifying his palate. As a rule, however, the diet should be of the simplest and plainest kind, yet nutritious. Of course, the strictest abstention from any article of diet that is known to produce asthma should be exercised.

There is nothing that promises so much for the relief and cure of asthma as change of residence to a suitable locality. Salter says "that possibly there is no case of asthma that might not be cured if the right air could only be found." The caprice of asthma is something very wonderful. A condition of atmosphere which is well adapted to one case will not always suit another. For many cases, therefore, experience alone will determine the suitable locality. There are, however, certain localities or conditions of atmosphere which seem well adapted to a very large number of cases. According to Salter, the atmosphere of London, contrary to what one would suppose, is very favorable to asthmatics. He says that "those parts of London, and other cities, that have the city character most strongly marked on them, are those that are most beneficial to asthma, that it is in the central, densest, smokiest parts, that the most striking results are seen." He cites a large number of cases showing perfect exemption from the disease by such a residenee.

Sea-side air will often exercise a curative influence on asthma. It has been noticed by asthmatics who have sought a sea-side residence for relief from suffering, that a change in the direction of the wind, from a sea breeze to a land breeze, will often cause a recurrence of the paroxysm. It seems evident, therefore, that a narrow strip of land, very nearly surrounded by sea, would be well adapted as a place of resort for asthmatic sufferers. Newport is thus located, and very favorable accounts are given of the beneficial influence of the atmosphere there on asthma. Dr. Samuel Ashhurst speaks very positively of the relief he has personally experienced from autumnal catarrh, accompanied by intense asthmatic symptoms, by a temporary residence at Beach Haven, New Jersey. So decided and invariable has been the relief that he has continued to resort to that place annually for more than twenty years.

Just the opposite condition of atmosphere, *i. e.*, an atmosphere greatly rarefied, such as is found in high elevations, is known to exert a most wonderful influence over asthma. Dr. Denison, who has studied very carefully the relation of the climate of Colorado to pulmonary diseases, says that in the treatment of this troublesome malady he knows of no remedy that can compare with the light air of this inland region. So fully convinced is Dr. Denison of the beneficial influence of this atmosphere that he adds, "almost without exception, uncomplicated cases of asthma may gain decided relief or a permanent cure in Colorado." He further remarks: "Generally speaking, the relief is marked as the base of the mountains is reached, and often after crossing the Missouri river. If all the results were written, hundreds of the present residents of Colorado could be cited who had asthma months or years before coming here, who had exhausted all the other known means of relief in vain, but who have now been nearly or quite free from asthmatic symptoms since becoming residents of Colorado." By way of illustration, Dr. Denison mentions two or three very striking instances, an account of which may be found in the Transactions of the American Medical Association of 1876.

1,214 Fairmount Avenue.

Pepsine of Yesterday and To-Day.

Now that fresh attention is being called to the subject of digestive ferments through the researches of physiologists on the one hand and pharmacists on the other, anything bearing on this subject is of interest. It has been but a few years since this subject has come into prominence, and the literature upon it has been vague and unsatisfactory. Now, however, much is being done to take it from

the region of speculation and empiricism, and place it on a scientific basis. Only a short time has elapsed since there was almost no reliable information to be found, outside a few chemistries, as to the mode of preparing pepsin. M. Boudault's formula was the one principally employed, and the product considered the best in medicine. According to the Druggists' Journal, from which we abstract the following, his mode of manufacture was thus:

The rennet bag was taken from the sheep, opened and cleansed of the contained food, and the mucous surface rubbed with a brush. The resulting pulp was mixed with a large quantity of water and allowed to macerate, with frequent agitations, for two hours. The whole was then thrown on a coarse cloth and the filtration facilitated by gentle stirring. Acetate of lead was then added to the filtrate and a very abundant precipitate formed. The supernatant liquid was then decanted and twice replaced with clean water. The precipitate was then diffused through fresh water and a decided excess of sulphuretted hydrogen passed through the liquid, care having been taken that the whole of the lead was converted into sulphide. The sulphide of lead was then separated by a number of filters and the filtrate immediately submitted to evaporation in shallow vessels, exposing a large surface at a temperature not exceeding 45° C. This evaporation was continued until the product was concentrated to a firm paste.

The pulp obtained from five hundred sheep yielded 125 grammes of pepsin. This product was described as a firm paste of an amber color, opaque, and possessing an odor that was not very agreeable and yet neither repulsive or putrid. It had an acid reaction, dissolved slowly in distilled water, furnishing a turbid liquid. The filtered solution was rendered cloudy by boiling, but the flakes separated on cooling. It was precipitated by alcohol, but it was not affected by nitric acid in the cold, though when boiled with it, it turned yellow without losing its transparency.

It was not affected by bichloride of mercury. It contained sulphuric, hydrochloric and phosphoric acids and also lime. This pepsin was brought to the pulverulent state by starch, one gramme of which was said to transform six grammes fibrin, prepared in the following manner: The fresh blood was taken out of the slaughter house and beaten with a bundle of twigs. The fibrin separated and attached itself to the twigs in filaments. It was then separated and washed until entirely free from color. This was preserved in strong brine, otherwise it would become rapidly putrefied. After this it was placed in one one-thousandth of hydrochloric acid, which rendered it transparent and caused it to swell into a jelly-like mass—from which bits of fat, etc., could be picked off. The acid water was then replaced by common salt, which again contracted and hardened it. When it was wanted for use it was taken out of the brine, and placed in a bath for an hour. It was then squeezed out and pressed in a cloth until it ceased moistening it. [The preservation of fibrin, however, is not absolute or indefinite, a little gas is disengaged and butyric fermentation ensues to a slight extent.]

It will be observed that the formula for the extraction of this was based upon the then common method of extraction of the majority of the neutral principles, namely, precipitation by plumbic acetate, etc.

The commercial powder sold as pepsin, and which many of our pharmaceutists supposed to be pure, was an insoluble starchy powder, highly colored and having a decided odor which was supposed to be one of the characteristics of pure, strong pepsin.

The original amylaceous form of pepsin originated in a pharmaceutical, and not a therapeutical necessity, so far as the 93 per cent. of starch was concerned, and so long as the dose was small, the influence of the associated starch was exceedingly slight; but when the abundance of the gastric secretion of a normal human stomach was considered, and as a consequence the dose of pepsin was greatly enlarged, then the tendency of the starch to produce under the circumstances "amylaceous dyspepsia," became prominent.

Subsequently the saccharated form of pepsin was introduced, and as improvements in the mode of manufacture had been made, the dilution (with milk-sugar, starch, or anything else) was no longer a necessity, and certainly was far from desirable, because the largely augmented dose of pepsin required so much bulk that administration of subdivided portions frequently became necessary.

Saccharated pepsin was introduced by Scheffer, and, quoting again from the Druggists' Journal: "Since the publication of Scheffer's paper upon this subject the manufacture of pepsin has been revolutionized, not only in this country but abroad. The sheep's rennet has been discarded and replaced by the pig's stomach. The starchy insoluble mixture presented by Boudault's formula has been superceded by the now familiar saccharated pepsin. The process for the manufacture of the latter is too well known to need description, nor need it be dwelt upon by way of comment, suffice it to say it is far superior to the former, not only in activity and solubility but also in odor and appearance. The preparation shows a decided mark of progress in pharmacy."

"Of a more recent date there appears a pepsin of a more concentrated form which while crystalline in appearance has no claim to that title." It is known in the market by various names, one of which is 'Golden Flake Pepsin.' Its claims are high test, entire solubility, pleasant taste, and a speedy and potent action. It should be entirely free from the nauseating impurities which distinguish several brands of that article, and also free from stench, sugar of milk, or other diluent." The Druggists Journal says of this form of pepsin:

"It is a scale very beautiful in appearance, soluble and active in digestive property. This appears to be in composition, the pure pepsin of Boudault, brought to the scale form by peptonic admixture. In other words, it is pepsin imbedded, so to speak, in peptone. By the presence of the latter, the scaly condition is reached."

To prepare this properly, better facilities are essential than those used for the preparation of saccharated pepsin. For example, vacuum appara-

tus, dry steam heat, readily controlled to regulate temperature, etc. The peptone when concentrated, requires special facilities also for drying on plates of glass, and every possible means taken to prevent decomposition while this delicate substance is being prepared. This product which bids fair to become the "pepsin of to-day" is certainly far in advance of anything yet presented to the profession. Its activity is much greater, one gram being equal to forty or fifty of the saccharated pepsin.

According to the same authority a still more active pepsin can be made from the stomach of the pig by another process, which consists in first taking the mucous membrane from the muscular tissue of a recently killed animal. This is a very important point. Good, active pepsin cannot be made from stomachs that have been kept for a long time, and those that have been salted down to preserve should be rejected. The pyloric extremity is to be rejected and the rest macerated in dilute phosphoric acid. The acid solution precipitated with lime water, and the precipitate removed by filtration, washed and redissolved by hydrochloric acid and the filtrate placed in a glass flask. To this acid solution a saturated solution of cholesterin in one part of ether and four parts of alcohol is added gradually by means of a long filter, passing down to the bottom of the vessel, and the whole mass well agitated. The cholesterin immediately separates and rises to the surface, bringing the pepsin with it. This mixture of cholesterin and pepsin is then separated by repeated agitation with ether.

This is a purer variety of pepsin with less peptone present, and shows the active power of this ferment to a marked degree. The disadvantages of this product, however, are its proneness to change and want of portability.

A liquid preparation which needs comment and praise, is one prepared with simple glycerine. This glycerite is prepared in the following manner: Take of the inner membrane of the pig's stomach finely minced, and a sufficient quantity of glycerine to cover. Let it stand three days, decant off the glycerine solution, repeat three or four times, and then filter through linen. This contains no acid. To it a larger or smaller quantity of hydrochloric acid may be added when required, or as may be directed by the practitioner.

This preparation is probably more free from peptone than any of the pepsin preparations, and gives us an excellent standard liquid.

It is the opinion of the writer that a preparation of this kind, if made a standard liquor for prescriptions, would be appreciated and admired.

A few simple experiments with the glycerite is interesting and instructive. Let us take three to prove the following:

1. *That pepsin by itself has no action on albuminous substances.*

2. *That pepsin in combination with acids, converts albumens in peptones.*

3. *That the casein of milk is coagulated before being converted into peptone, and that the curdling is caused by some ferment which sets up lactic acid fermentation of the sugar of milk, and is not due to or dependent upon the acid of the pepsin solution.*

As this glycerite is free from acid, to prove the first and second, it is only necessary to subject coagulated albumen or fibrin to two solutions, one prepared with the other without acid. It will be found that the former produces peptone rapidly and the latter not at all, and that the activity is in proportion to the acid present up to a certain point, beyond which the digestion is impaired.

For the third experiment, milk can be tested with both acid and neutralized artificial gastric fluid prepared from this glycerine or the simple glycerite with acid. It will be found that coagulation will take place without as well as with the presence of acid, but if the glycerite be heated beyond 120 deg., this peculiar ferment disappears as well as the digestive principle called pepsin.

We have not yet reached a full knowledge and understanding of this principle, in fact, we know as yet little about it. During the past few years pharmacy has wrought out for us a greatly improved product, and given to us a vast amount of information on the subject.

Book Reviews and Notices.

Index Catalogue of the Library of the Surgeon-General's Office, United States Army. Authors and Subjects, Vol. III. Cholecyanin Dzondi, Washington. Government printing office, 1882.
With the compliments of the Surgeon-General, U. S. A.

This volume includes 9043 author-titles, representing 10,076 volumes and 7,386 pamphlets. It also includes 8,572 subject-titles of separate books and pamphlets, and 28,846 titles of articles in periodicals. There are also catalogued 4,355 medical portraits, under the heading of "Collection of Portraits." This volume was edited by J. S. Billings, M. D. Surgeon, U. S. A., and consists of 1020 pages, double columns, and printed on excellent paper, like the preceding two volumes. Dr. Billings deserves the sincere thanks of the medical profession for the interest he has taken in this work and for the labor performed. We trust, for the interest of science, the reputation of the work, and the value enhanced to the Library by having such a complete index, that Congress will annually make sufficient appropriation to continue its prompt publication, and that Dr. Billings shall be continued to prepare and edit it. To this end we ask of the members of Congress from Michigan to lend their aid for its prompt continuance. In examining the list of the names of physicians and surgeons whose portraits are in the Surgeon-General's Library we notice but few of the living men of this century. Would it not be well that the Surgeon-General should, by circular or otherwise, announce that the Library would take charge of the photographs, in cabinet size, of all physicians who would send theirs to the Surgeon-General, together with a brief resumé of their professional and public history—especially of all of those who had any connection with the army during the rebellion. Congress should be asked to bear the expenses of the office.

Fistula, Hemorrhoids, Painful Ulcer, Stricture, Prolapsus, and other Diseases of the Rectum. Their diagnosis and treatment, by William Allingham, M. D., Fellow of the Royal College of Surgeons of England,

Surgeon to St. Mark's Hospital for fistula and other diseases of the rectum, etc. Fourth revised and enlarged edition, with illustrations.
Philadelphia: Blakiston, Son & Co., 1012 Walnut St. 1882. Price in paper, 75 cents; in cloth, $1.25.

This is a copy of the cheap edition, printed on good paper, with clear type and well indexed. For reading purposes the edition in paper is good enough, but for library purposes we prefer the cloth, especially as the title of the book is printed on the back and can readily be found when on the shelf.

The fact that the work has reached its fourth edition is sufficient proof that it is appreciated by the medical and surgical reader. Indeed, from our personal knowledge, a better book has not been written and published on the subject upon which it treats. It has been translated into the French, Italian, Spanish and Russian languages, which is strong proof of the estimation in which it is held in other countries.

There is no reason why every practicing physician should not possess a copy, and we advise all to purchase it.

Special Notice.—The publishers are in possession of a few copies of a finer edition of Dr. William Allingham's "Diseases of the Rectum," printed in London, on thick paper, from large type, the illustrations being printed on separate sheets and bound in, with good margins, suitable for rebinding in handsome form. Price, cloth, $3.00.

Speech and its Defects Considered Physiologically, Pathologically, Historically and Remedially. By Samuel O. L. Potter, M. A., M. D., author of "An Index of Comparative Therapeutics," "A Quiz—Compend of Anatomy," "A Quiz—Compend of Materia Medica and Therapeutics," "Lea Prize Thesis of Jefferson Medical College." Published by permission of the faculty. Price $1.00
Philadelphia: P. Blakiston Son & Co., 1012 Walnut street. 1882.

This book is written by one who has suffered from stammering and who has made in his own person practical trial of several of the recognized methods of cure, and also has examined all the attainable literature on the subject. We should judge the author presents his views in a scientific manner and enters upon the treatment as one would who perfectly understands his subject.

We would advise any person who suffers from this infirmity to procure a copy and judge of its merits for himself, as what is written appears reasonable on its face and can be easily put in practice.

The Physician Himself and What He Should Add to His Scientific Acquirements. By D. W. Cathell, M. D., late Professor of Pathology in the College of Physicians and Surgeons of Baltimore; ex-President of the Medical and Surgical Society; active member of the Medical and Chirurgical Faculty of Maryland; honorary member of the Lincoln Philosophical Society, etc., etc. Second edition. Carefully revised.
Baltimore: Cushings & Bailey, 262 N. Baltimore street. 1882.

But a short time ago we had the pleasure of recommending the above work to our readers, and we now learn that a second edition has been necessitated. So great was the demand for the first that it was exhausted. The author informs us that in preparing this edition he has divided the work into chapters and made some other changes and additions which he believes will enhance its value. In this we fully coincide. We cheerfully continue our commendation.

Nitro-Glycerine as a Remedy for Angina Pectoris. By William Murrell, M. D., M. R. C. P., Lecturer on Materia Medica and Therapeutics at the Westminster Hospital, Senior Assistant Physician to the Royal Hospital for Diseases of the Chest. Price $1.25.
Detroit: Geo. S Davis, Medical Publisher, 1882.

This powerful remedy has been used a large number of times in angina pectoris by the author, with uniform success. The object of the book is to give directions for its use. This the author does in a very interesting manner. He first gives the form of preparation, which is what is known as Liebe's process. He then goes on to give its action upon animals, its introduction, properties, physiological and therapeutic effects upon man. He dwells considerably upon its action on the pulse, which he compares with that of nitrite of amyl. Twelve cases are then given of the disease to illustrate its action, with results. The best way to give it is then discussed. The dose, frequency of administration, accessory treatment and its safety, complete the subject. A full index ends the book. The reputation of the author is a sufficient guarantee of the truthfulness and safety of the results of this dangerous remedy. We advise our readers to send to the publisher for a copy, for if this painful disease can be so easily remedied every physician should have the information of knowing how to do it.

What to do in Cases of Poisoning. By the same author. Second Edition. Price $1.00.
Detroit. Geo. S. Davis, Medical Publisher.

This is a vest-pocket edition of some 96 pages. The object of the author is to give straight-forward directions for the treatment of the commoner poisons. The tables were originally drawn by the author for his own guidance but finding them so useful to himself, he presents them to his professional brethren with the hope that they may be as beneficial to them. This is the second edition, and fatal doses have been added. He recommends what he calls "The Antidote Bag," which should be to the toxicologist what the midwifery bag is to the obstetrician; kept filled and ready for use, and should contain instruments, emetics, stimulants, antidotes and hypodermic injections. He goes on to describe the agents under the foregoing heads. The poisons are then taken up and the antidotes with their forms of preparation are given; each poison has its fatal dose given. It is a useful and convenient little book, and as such we advise all our readers to procure it. It is to be obtained from the publisher.

New Commercial Plants and Drugs. No. 6, Part I. Fibres: Their Botanical Sources; The Methods of examining them under the Microscope; and their Treatment by the Ekman Process. Illustrated with six colored Plates. Part II. New Plants and Drugs, Their Cultivation and Uses. By Thomas Christy, F. L. S., with the kind assistance of M. Vétillart, of Paris.
London, Eng.: Christy & Co., 155 Fenchurch Street, E. C. 1882.

This book, including the wrapper and the lithographs in six colors, is printed upon paper made entirely from wood converted into pulp by the Ekman patent process. The plates in this work illustrate the fibre as found in flax, hemp, jute, cotton, China grass, New Zealand flax, mudar bark, paper mulberry, nepal paper plant, alfa or esparto pite, Agase Americanum, Manilla hemp, palm, bowstring hemp, pineapple and white fir. Their botanical history and the chemistry of

their fibres are explained. Six qualities of paper made from wood are represented in the make-up of the volume, and we must say they are beautiful specimens of the art of paper making. The typography is clear and distinct, and the colored plates are indeed excellent. With such results from wood, rags will soon be at a discount.

Transactions of the Mississippi State Medical Association of the Fifteenth Annual Session, held at Oxford, April 5ht, 6th, and 7th, 1882. With the Roll of Members and Reports on Medical Topics. Published by the Association, Jackson, Miss. Wirt Jackson, M. D., President, Jackson; T. N. Fullilive, M. D., Recording Secretary.

The transactions show that the medical profession of Mississippi are active and interested in their state society. The membership is two hundred and sixty-seven. Thirteen papers were read and acted upon besides a number of cases of surgery, by the different members. The mechanical work is creditable to the society and the publishers. We extend our best wishes for the society's success and our thanks to the secretary for the copy sent us.

Transactions of the Colorado State Medical Society, at its Twelfth Annual Convention, held in Pueblo, June, 1882. Geo. W. Cox, M. D., Permanent Secretary, Colorado Springs, Col.

The volume before us shows that the society is prosperous. Several able articles were read and discussed. The address of the President was considered of so much practical value as to be printed in pamphlet form for special distribution, by order of the society. The east has no longer a monopoly of the medical talent of the country. The west demands intelligence and the supply follows. Hence the transactions of this medical society compare favorably with those of the east and their contents are generally of a more practical character. We congratulate the society on the handsome manner in which their transactions are issued and our thanks for the copy received; also the address of the President, Dr. H. A. Lemen, of Denver.

Microscopical Diagnosis, by Charles H. Stowell, M. D., Assistant Professor of Histology and Microscopy. University of Michigan, author of the Students' Manual of Histology, joint editor of the Microscope, and Louisa Reed Stowell, M. S., Assistant in Microscopical Botany, University of Michigan, joint editor of the Microscope. Illustrated with one hundred and twenty-eight engravings on wood and forty seven figures on stone. Total number of pages, 250. Detroit: George S. Davis, Publisher. 1882. Price $3.00.

This is a book teaching the practical application of the Microscope as a means of diagnosis, and is divided into three parts. The first part treats of the microscope, how to use it, and how to prepare specimens for its application. Instruction is then given how to examine the blood, the epithelium, contents of oral cavity, sputa, vomited matters, fæcal matters, milk, muscle, urinary deposits, parasitic diseases of the skin, tumors, starch, and staining of blood.

Part II. is devoted to the examination of the structure of vegetables, adulteration of the cereals for food, and the structure of many of the new medicinal remedies introduced to the medical profession in the THERAPEUTIC GAZETTE of the last three years.

Part III. gives some hints on the preparation and mounting of microscopic objects.

The author sets forth fully in his preface the value of the microscope in diagnosis from his standpoint as a teacher, but we think he goes a little too far when he claims "that those physicians who do not use the microscope are either totally devoid of any desire to advance in their profession, or are lacking the necessary qualifications to enable them to appreciate the useful and practical." There is an old adage, "every man to his trade," and experience proves that no one person can be fully accomplished in every one of the arts and sciences. Nevertheless, a knowledge of how to manipulate this useful instrument and to read and apply its revelations is an accomplishment that very few of the busy practitioners of medicine have time to perfect themselves in, and yet one that is very desirable. "A little learning is a dangerous thing," etc. and when applied to the miscroscope not much good of a certainty can be expected. So much of the book as refers to the examination of urine and the plates which represent its constituents we think cannot be excelled, and is well worth the price of the book. The whole book is highly scientific in character and very instructive. Part 1st, is especially so to the medical reader and practitioner. Part 2, more so to the scientist, the botanist and the manufacturer. The volume closes with some remarks on the preparation and mounting of microscopic objects. We had almost forgotten to call attention to the rare exemplification of the double stained blood corpuscles of which there are ten representations. The book is handsomely printed and bound, and we cordially commend it to the medical profession as worthy of study and a prominent place in their libraries.

Lacerations of the Female Perineum and Vesico-Vaginal Fistula, their History and Treatment. with an account of the Methods of Performing the Operations, and Instruments used, Illustrated by Cases. By D. Hayes Agnew, M. D., Professor of Surgery in the University of Pennsylvania. Seventy-five Illustrations. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut St. 1882. In Paper 75 cents, Cloth, $1.28.

This is an excellent practical monograph by a distinguished surgeon and one who is fully competent to write upon the subject and to give his readers such instruction as will enable them to properly diagnose the condition of their patients and to apply the proper measures for their cure.

The subject is discussed under the heads of 1st, Anatomy of the parts; 2d, History of Lacerated Perineum and its Treatment; 3d, Vesico-Vaginal Fistula, its History and Treatment. Both forms of injuries are well explained by representative cases.

The modes of operating by Sims, Bozeman, J. W. Simpson, J. Baker Brown, Battey, Collis, Meadows and others, together with the author's own an all explained and most of them represented. Particular care is given to the medical management of the patient as a prominent factor in the results of the operation. Diarrhœa with tenesmus he regards as one of the causes of failure, therein differing from a Michigan surgeon who administers laxatives during the process of union, as a measure of success especially if the fistula be a recto vaginal one.

We heartily recommend the work to our readers as the latest one on the subject and most valuable.

A New Feature. From the Sanitary Engineer of Oct. 18, 1884.

"When the announcement that the Congress of the United States had refused to grant the appropriation needed to defray the expenses of continuing the publication of the Bulletin of the National Board of Health reached us, we were in Europe. The expressions of regret at this action we there heard, and the complaints from all parts of this country that have since reached us from those capable of appreciating the value of these records, induced us to propose to the National Board of Health that we would give space to print the most important information heretofore published in the Bulletin, if the Board would place at our disposal such data as would enable us to make the necessary compilations.

This offer having been accepted, we have provided for a permanent increase in the size of the Sanitary Engineer, and one page at least in each issue will be devoted to the purpose of continuing, so far as we are able, the work hitherto performed by the Bulletin.

It may be well to state that in taking up this new feature, our purpose is first to make this journal of more value to its readers; and secondly, it seemed to us desirable to keep together the corps of correspondents of the Board, many of whom might be unwilling to continue sending information not likely to be promptly available for public inspection and comparison. This work would have been begun sooner but for the fact of our absence from the country, before alluded to. It is proposed to develop this department as rapidly as the interest in it is made manifest.

Meanwhile, we ask the indulgence of our readers for a few weeks, as it is hardly to be expected that our first attempt will show as full and complete information as we hope to give."

Subscription price, $3 per annum.

[We respectfully call the attention of our readers to the above extract from the Sanitary Engineer, entitled "A New Feature," as it may be to them of more than passing value.—ED.]

Journal of Cutaneous and Venereal Diseases. Monthly. Price $2 50 per annum. Vol. i, No. i. Henry G. Piffard, A., M., M. D., and Prince A. Morrow, A. B. M. D., Editors.
New York: Wm. Wood & Co., 56 and 58 Lafayette Place, Publishers.

This is a handsome journal of 32 pages devoted to cutaneous and venereal diseases. The reputation of the editors and publishers is sufficient to guarantee its standard qualifications. No. 1 has a portrait of Dr. Fox's case of trichophytosis cruris. Please exchange.

A Practical Manual of the Diseases of Children, with a Formulary. By Edward Ellis, M. D., Late Senior Physician to the Victoria Hospital For Sick Children; Late Physician to the Samaritan Hospital for Women and Children, and formerly Obstetric Physician's Assistant to University College Hospital. Fourth edition; revised and enlarged
Philadelphia: Presley Blakiston, 1,012 Walnut Street. 1882. Price $3.

We had occasion to notice the above work in a former edition and to express our unqualified opinion of its merits. In the present edition many portions have been rewritten and much new matter added where the text seemed to require it or modern progress seemed to demand it. Valuable contributions to the chapter on Diseases of the Brain and Nervous System have been added, all giving additional value to the work. Had we any fault to find it would lie in the size of the dose generally given, but the judicious practitioner can readily adjust that to meet his special views. Time and experience still forces us to commend this work to the profession, and to students in particular.

A Medical Index, being a Completely Indexed Note Book for Students and for Physicians. A General Index and Record Book for all valuable professional reading and experience. Arranged to minimize the labor and to maximize the usefulness. Copyright 1881. By Joel A. Miner. Published by Joel A. Miner, Ann Arbor, Mich. Price, $3.50. Order by mail.

This is an indispensable book for every reading physician, as by using it when reading nothing valuable can well escape. The labor is so light in its use as to be inappreciable. It is especially valuable to students as an indexed medical notebook by the saving of time.

The index of diseases and remedies is full and alphabetically arranged. There are 378 pages, with ruled and printed headings, neatly bound, and excellent paper. We advise our readers to procure a copy.

Labor Among Primitive Peoples. Showing the development of the Obstetric Science of to-day from the Natural and Instinctive Customs of All Races, Civilized and Savage, Past and Present. By Geo. J. Engleman, A. M., M. D., Professor of Obstetrics in the Post Graduate School of the Missouri Medical College. Master in Obstetrics of the University of Vienna. Fellow of the American Gynæcological Society; of the London Obstetric Society; of the Pathological Society of London. Consulting Surgeon to the St. Louis Female Hospital; St. Ann's Lying-in Asylum; Mexico Hospital, etc. 56 Illustrations.
St. Louis: J. H. Chambers & Co. 1882.

This is a very interesting and indeed an instructive little book. It is unique in its character and opens up an ethnological field truly worthy of cultivation. We were interested in the subject as it appeared in the Transactions of the American Gynæcological Society for 1880; in the American Journal of Obstetrics, 1881–82, and in the Courier of Medicine of St. Louis for March and May, 1882. These series of articles have been brought together and issued in a neat volume by the author. It is not a book to review or to find fault with, but it is a book full of historical information on a special subject in which all medical men are interested, and also demonstrates that many things pertaining to parturition are not so new as are claimed for them. A full index is given. We recommend it with pleasure to our readers and advise all to procure a copy for themselves and their students also.

We are informed by P. Blakiston, Son & Co., that they have nearly ready a handsome edition of the diseases of the liver, by George Harley, M.D., F.R.S., etc., author of "The Urine and its Derangements" and "Diabetes, its various Forms and Treatment." In octavo, on fine paper, from good type, illustrated with colored plates and thirty wood engravings. To be bound in heavy cloth, beveled edges, and in full leather with raised bands. The publishers call special attention to this valuable work, the only thorough book now before the profession. The reputation of its distinguished author is sufficient to guarantee its merits.

We take pleasure in acknowledging the receipt of the Weekly Health Bulletin, ending Saturday, Oct. 14, 1882. Issued by the Provincial Board of Health of Ontario, with weather report supplied from the meteorological department. Dr. P. H. Bryce, M. A., Secretary.

Address of P. O. Hooper, M. D., First Vice President. Delivered before the American Medical Association at its annual meeting held in St. Paul, Minnesota, June 6—9, 1882.

Puerperal Eclampsia Successfully Treated with Veratrum Viride, with cases, from Transactions Mississippi State Medical Association, 1882. By N. L. Guice, M. D., Fayette, Miss.

Two Monographs. By E. B. Banning, Sr., M. D. 1st. The comparative merits of the Gypsum Jacket and Adjustable Supports in the Treatment of Spinal Affections. 2nd. The Pathology and Therapeutics of Uterine Displacements.
Presented by A. T. Banning M. D., 9 St. Mark's Place, New York.

Observations on the Therapeutic Use of Alcohol. By Alfred K. Hills, M. D., New York.

Stricture of the Rectum Treated by Electrolysis. By Robert Newman, M. D., of New York. Reprint from New England Medical Monthly, September, 1882.

The Female Perineum. By T. G. Comstock, M. D., Master in Obstetrics of the University of Vienna, St. Louis. Reprint from the St. Louis Clinical Review.

Wilford's Microcosm. A Religio-Scientific Monthly, devoted to the Discoveries, Theories and Investigations of Modern Science in their bearing upon the Religious Thought of the Age, with other matters of general interest. A Wilford Hall, Ph. D., editor and proprietor, 23 Park Row, New York. Please exchange and send Nos. 1 and 2.

Eureka. The Epitome. A Monthly Medical Journal of Practical Medicine, Pharmacy and Chemistry. Edited by C. T. Kirk, M. D., assisted by a corps of regular contributors. Terms, $2 in advance. Meridian, Miss. 1882. Vol 1, No. 1, September, 1882. Our best wishes. Exchange.

Quarterly Epitome of American Practical Medicine and Surgery. Collateral to Braithwaite's Retrospect. Part xi., September. W. A. Townsend, Publisher. Vol. iii. $2.50 a year in advance. Quarterly parts 75 cents.

The Quarterly aims to give, as its name implies, a resumé of the leading information gleaned from American medical journalism, and as such is a valuable acquisition to the medical profession. To be had in Detroit from Thorndike Nourse, wholesale bookseller and stationer. Please send us Parts 2, 3 and 4, not received, and oblige.

Therapeutic Progress.

ABSTRACT OF A LECTURE ON OIL OF EUCALYPTUS* IN MIDWIFERY PRACTICE.—[After some remarks on the nature of "puerperal fever," the symptoms of a typical case of acute puerperal septicæmia were given, and also of a case of puerperal pyæmia: and the relationship of these diseases to surgical fever was shown. These being diseases associated with putrefaction, the importance of thorough cleanliness during labor and throughout the puerperal condition was insisted upon. The following were noticed as amongst the predisposing causes of septicæmic poisoning: 1. The readiness with which the lochial discharge decomposes. 2. The natural condition of the generative tract after parturition. 3. The various lacerations—perineal, vaginal, and cervical—either at the os or in the cavity. 4. The intense prostration of the nervous system, so marked in many of the single women in maternity hospital practice—so great as sometimes to amount to mental collapse: this condition vastly increasing the tendency to absorption of the discharges. The dangers of infection were also dwelt on.]

*Our readers are cautioned not to confound the nostrum sold as Eucalyptol with the genuine Oil of Eucalyptus.—ED.

To wait for the appearance of symptoms of mischief is sometimes a fatal mistake, as the system may be overpowered by the disease before there is any warning of danger. It is therefore of the utmost importance in the employment of antiseptics in midwifery practice to use them from the very first, since the blood may be poisoned within twenty-four hours after the completion of labor. The advantage of retaining for several days after parturition an efficient contraction of the uterus is obvious, and for this purpose I give, as a matter of routine, a mixture like the following, which I find also very serviceable as a preventive of after-pains:—Solution of muriate of morphia, one drachm and a half; tincture of nux vomica, half a drachm; liquid extract of ergot, two drachms; tincture of orange, three drachms; water to two ounces. One drachm in a little water every four or six hours. That injections of water mixed either with carbolic acid or Condy's fluid are valuable cannot be denied; that in cases of excessively fetid lochia, with general febrile disturbance, they may act like a charm I have often found. These latter are cases, however, in which the blood seems to be charged with only the chemical products of decomposition; and it must be admitted that in cases of genuine septicæmia the employment of injections is often of no avail. Of course, if used from the first day, they will go far towards preventing or diminishing septic mischief. They are, however, irksome to the patient, whilst in the hands of an unskillful nurse they may be a positive danger.

That a midwifery case cannot be conducted throughout on absolutely antiseptic principles will be readily admitted by those of you who are familiar with antisepticism as carried out in surgical practice. We should, however, endeavor to come as near to this standard as is possible to us as obstetricians. That vaginal or even uterine injections of antiseptic fluid every few hours come near to complete antisepticism is absurd. In order to act efficiently on the lochial discharge we ought to attack it with the antiseptic as it pours from the os uteri, and to keep up this action continuously. What antiseptic will best suit for this purpose? Carbolic acid, which has proved so great a gain to the surgeon and in a diminished degree to the obstetrician, has the following objections:—1st. In the quantities required it would be poisonous. 2nd. It would cause severe irritation, and thus prevent the healing of lacerations. 3rd. It would coagulate the lochial discharge, causing its retention even within the uterus. 4th. To many patients it has a decidedly sickening odor.

Now, when at the meeting of the Clinical Society of London on the 13th of May, 1881, Mr. Lister recommended oil of eucalyptus as a substitute for carbolic acid where the latter was inadmissible, it occurred to me that this substitute might be more extensively employed in obstetric practice than had been considered safe with carbolic acid. Since then I have put it to the test, and its advantages I have found to be the following:—1st. It is non-poisonous. 2nd. In the quantity and strength required it is unirritating. 3rd. It does not coagulate the lochia, which, by separating the lips of the vulva, can be seen to flow out in a liquid stream. 4th. Its odor is, with rare exceptions, a pleasant one. 5th. It seems to act as a uterine stimulant, causing and assisting to maintain uterine contraction. Formed into a pessary of a suitable shape and size, it is easily applied to the neighborhood of the os, and retained there. To secure this the pessary must be broad and short, must melt slowly but completely, and must contain a large percentage of the antiseptic oil. These requisites I have found the following formula to supply:—Oil of eucalyptus, six drachms; white wax, four drachms; cocoa butter, four drachms; mix and divide into twelve pessaries. One of these must be applied night and morning immediately after the usual sponging, and, though the napkins are frequently changed, the

odor will be quite perceptible on the one removed prior to the next sponging, twelve hours later. In cases of miscarriage, or when the lochia has diminished materially in quantity—say, six days after confinement—I have found the above strength produce irritation, and the following will then be found preferable: Oil of eucalyptus, four drachms; white wax, 160 gr.; cocoa butter, four drachms; divide this mixture into twelve pessaries, and label them No. 2. These also may be used at first night and morning, and afterwards at night only. I show you these pessaries; they are made by first melting together the wax and cocoa butter in a vessel resting in hot water; the oil of eucalyptus is then mixed with this, and the fluid poured into the ordinary two-drachm pessary mould, each cavity being somewhat more than half filled. I have never been able to satisfy myself that the eucalyptus was absorbed into the system to any material extent. This is probable, however, and, in one case, seemed to be proved. This was a case of severely ruptured perineum, which was stitched and united throughout. The pessaries had been continued for sixteen days, when an erythematous rash appeared over the whole body, disappearing immediately on the cessation of the eucalyptus treatment. Though uncertain as to the fact of a material absorption of the oil into the system, I am persuaded that the oil does not remain at the os, but freely passes into the cavity of the uterus. For it is admitted that the uterus for several days after labor is naturally in an alternate state of contraction and relaxation, and whilst during contraction it will empty itself, during relaxation again whatever is lying at the os or upper part of the vagina will be sucked into the vacuum produced. The eucalyptus will therefore find its way quite into the uterine cavity. When I said that, with rare exceptions, the odor is agreeable, I referred to a decomposition of the eucalyptus oil which sometimes takes place, giving the napkin a semi-fetid odor. That this does not arise from a change in the lochia I have proved by simply omitting the next pessary when due; I then found that the lochia was absolutely sweet.

When I began a year ago to use this antiseptic in hospital practice, I ordered the pessaries to be used only for those patients who, from the nature of their labor or other cause, were likely to give trouble; and, to those patients whose lochia had become offensive or whose recoveries were interrupted. In the case of the former the pessaries were begun immediately after labor; in the latter on the appearance of bad symptoms. In the former the result was invariably satisfactory; in the latter the treatment was a recognized aid to other measures. It was soon noticed, however that the cases in which the labor was easy and natural gave afterwards considerable anxiety, usually from unrecognized mental distress, perhaps increased by the receipt of unwelcome news. I soon, therefore, saw the necessity for beginning the antiseptic pessaries immediately after labor in the case of all the patients. The consequence was that whereas offensive lochial discharge had been no rarity—and when once this appeared in one patient it rapidly spread to others—fetid lochia was almost entirely banished; the only case of undoubtedly putrid lochia having arisen from extensive superficial gangrene of the vagina, after a severe labor completed by the forceps. This woman, moreover, made a rapid and complete recovery. In some of the cases an offensive odor was suspected, but this had generally vanished when the next napkin was removed; or, if it persisted, was found to have arisen from the fact that the pessaries had been for a considerable time in the hospital, having thus lost part of their volatile oil. They ought, therefore, to be made as far as possible just as they are required; since they will change after a few days. During this period one of the patients had severe ascites, from which she died. There had been a history of disease, the exact nature of which could not be ascertained, but hepatic disease was supposed to be the cause of the ascites. About seventy ounces of fluid was removed by tapping. This fluid was absolutely sweet when removed, and it remained so for days after, making it exceedingly probable that there was no septic element in the peritoneal cavity.

In private practice, where the class of patients is of a more hopeful nature, I have restricted the use of the pessaries to the cases requiring special treatment from the beginning of the puerperal state. Amongst these were the following: A case of inversion which I was not called to till several hours after its occurrence, a case of premature labor following acute bronchitis in which the patient was almost in a state of collapse; a case of subacute phthisis; cases requiring operative treatment and with dangerous complications. These cases all did extremely well. In only one of them—the case of phthisis—was there at any time an offensive discharge, and this was in the second week, and forty-eight hours after the last pessary had been introduced. I should mention that it is now the practice at this hospital, as a special precaution, to use carbolic vaginal injections night and morning just before the introduction of the medicated pessary. In my private practice, however, the usual night and morning carbolic sponging alone preceded the use of the eucalyptus.

Regarding the use of eucalyptus as a curative in pyæmia, I have fortunately only one case to bring before you. In relating it I shall confine myself to the main points of the case.

Mary Anne M— was admitted and delivered on November 22nd, 1881. Her labor was easy and normal. Beyond a "scared" look, and the fact that this was her third (?) illegitimate child, the case presented nothing unusual. The temperature rose, however, on the fourth day, and continued high. For some time there was nothing to account for the fever, there being no abdominal distension or tenderness till later on, and the discharge remained sweet throughout the entire illness. No pessaries were used until the fever had set in. The patient steadily becoming worse, was, at an early stage of her illness, removed to another ward, which was set apart for herself and her nurse. It was not till the third week that the true nature of the disease was apparent. At this time several parts of the limbs became swollen, whilst later on a large fluctuating swelling appeared on the back of the chest. The treatment consisted at first mainly of large doses of quinine with aconite, and a liberal amount of stimulants. Later on eucalyptus was given internally by the mouth and by the rectum. By the twentieth day it was perfectly evident that the patient was sinking, and that a few hours would see the end. Determined not to leave anything undone, I now ordered hypodermic injections every hour of a mixture composed of oil of eucalyptus, five minims, and olive oil, twenty minims. I had found that one part of eucalyptus to two parts of olive oil could be borne without irritation by a granulating perineum, and I thought one to four a safe strength to start with for hypodermic injection. This producing little or no irritation, the quantity was gradually increased to eight minims of eucalyptus to sixteen of olive oil. It was soon evident that the patient was rallying; but as she improved, the irritation produced by the injections became so great that the resulting swellings could not be distinguished from those arising from the disease. The injections were now diminished in frequency, and finally, on the fourth day, abandoned. Soon the patient began again steadily to lose ground, rallying again on the resumption of the hypodermic injections. For a considerable time she seemed to hang between life and death, but under the generous care of the matron and the house-surgeon, she gradually improved, leaving at last for the Town's hospital with abscess of the left knee only, all the other swellings hav-

ing slowly disappeared. There the knee was opened, and the case made most satisfactory progress. The woman called on me a few weeks ago. Her general health was then excellent, and beyond a slight limp she bore no traces of her illness.

From one case it would be unwise to draw positive conclusions as to the benefit of the eucalyptus used hypodermically as a cure for pyæmia, but I think I am justified in recommending that, under similar circumstances, it should be tried.—Samuel Sloan, M. D., F. F. P. S. G., in *The Lancet*, Sept. 1882.

THE FUNCTION OF THE CARDIAC AND PYLORIC PORTIONS OF THE STOMACH.—Some time ago, in connection with my physiological lectures, I performed an experiment with the object of testing the function of the two divisions of the stomach. It would have no value alone, but it tends to confirm the observations of others, and may serve as a convenient text for the discussion of the subject of the present article.

And first a word in regard to the histology of the stomach as recently described.

The inner surface of the gastric mucous membrane is lined with cylindrical epithelium. The epithelial cells have two zones. The upper—that next the free surface—is the thicker, and is composed of protoplasm which is being changed into mucin (paraplasm of Kupfer*). The lower zone is protoplasm, and contains the nucleus Many of the cells upon examination show the goblet shape which indicates the discharge of their mucoid contents. It is these surface cells which secrete most of the mucus that lines the stomach in the intervals between digestion.

The glands of the fundus are simple straight tubes, only occasionally branching at the base. Near the orifice they are lined with the cylindrical epithelium of the surface. In the remaining portion the gland is lined with small columnar cells, the "chief cells" of histologists, and with large oval cells, the "border cells." The latter are placed between or external to the former.†

The glands of the pyloric end of the stomach are compound, as a rule, and are larger than those of the fundus. They are lined with an epithelium formerly confounded with that of the surface, but now believed to be essentially like the "chief cell" of the fundus.‡

As regards the functions of these different glands and cells, the following views have the latest and strongest support:

In the fundus there is secreted a juice which is very strong in acid (about .5 per cent), and is also strong in pepsin. In the pyloric end there is secreted an alkaline viscid fluid which is strong in pepsin. The "chief cells," and the lining cells of the pyloric glands which resemble them, are especially concerned in secreting pepsin; the "border cells" are especially concerned in secreting the acid (H Cl) of the gastric juice.¶ The pepsin in the chief cells is thought to be partly in a perfected and soluble condition, partly in an insoluble form, analogous to that of zymogen in the pancreas.§ The acid of the gastric juice transforms this insoluble "mother ferment" into the active and soluble pepsin.‖ The evidence for the above view is as follows:

1. Partsch,* Swiecicki,† and others find that in the œsophagus of the frog there is secreted an alkaline pepsin-building fluid, while in the stomach the secretion is acid. The œsophageal and gastric glands are distinctly separated. Now the gland cells of the frog's œsophagus resemble very closely the "chief cells" of mammals, while the gland cells of the frog's stomach are identified with the "border cells" described above.

2. Snippings from the gastric mucous membrane digest the more quickly the greater the number of "chief cells" they contain ‡

3. Heidenhain,¶ who is the most prominent advocate of this view, has made a series of experiments which, he considers, settles definitely the question of the function of the pyloric glands. He isolated a portion of the fundus of the stomach in eight dogs and a portion of the pylorus in six dogs, of which latter three lived. By means of fistulæ he obtained the secretion from these different parts. That from the fundus was uniformly acid, containing, as an average of thirty-six tests, .52 per cent. of free H Cl, while the average in the ordinary gastric juice of the dog is about .3 per cent. It contained pepsin in good amount. The secretion from the pyloric fistulæ was constantly alkaline, very viscid, glassy in appearance, and rich in pepsin, though poorer than the fundus secretion. Upon the addition of acid fibrin is energetically digested.

This seems very conclusive. It should be stated, however, that Friedinger,§ Von Wittich, Wolfhügel, and a few others have, until recently, at least, denied this peptic power of the pyloric secretion, one of their reasons being that infusions of the mucous membrane are not active. According to my observations, the pyloric and cardiac portions of the stomach are more sharply distinguished in the dog than in man. So that we cannot draw inferences too confidently.‖

4. My own investigations have simply a slight confirmatory value.

In the first place, in examining the stomachs of dogs killed during active digestion (and I have examined over fifty), I often noticed a large amount of thick, viscid, glassy-looking substance covering the pyloric end of the stomach. It was evidently secreted during active digestion, since I have not observed it in empty stomachs, and, therefore, was not mucus, but the same fluid obtained by Heidenhain from his pyloric fistulæ. It lined the pylorus, and extended through the sphincter. It seemed admirably adapted for lubricating the surface and helping along the passage of food. Such a function would not be superfluous in an animal like the dog, whose stomach so often contains ragged pieces of bone and foreign matters, and I cannot but think that the pyloric secretion has a lubricating as well as digestive function.

Experiment. A large dog, weighing about sixty pounds, was etherized, the stomach opened by an incision near the pylorus, and the organ thoroughly washed out. A ligature was thrown around the cardia (to prevent subsequent vomiting), and another ligature at about the junction of the cardiac and pyloric portions of the stomach. Previous to

*Kupfer. Berlin. klinische Wochenschr., xv., 47. p. 703, 1878.

†Heidenhain and Rollett first and independently described these cells.

‡Kupfer. Vide loc. cit. Also Grützner. Archiv f. Physiolog., xx., 8 u. 9, p. 395 1879.

¶Edinger. Archiv f. mikr. Anat., vol. xvii., p. 193, thinks there is really but one kind of cell. and that the border cells are developed from the chief cells. Herrendörfer supports this, as I think, untenable view.

§Langley (J. N.), Journal of Physiol., vol. iii., Nos. 3 and 4, p. 269. 1882. thinks that pepsin is not found in the living stomach, but only pepsinogen. The granules of the gland cells are this pepsinogen.

‖Langley (Journal of Phys., January, 1882) thinks there is no free pepsin in the cells, but only the pepsinogen.

*Partsch. C. Archiv f. mikros. Anat., xiv., 2, p. 179, 1877.

†Swiecicki. Schmidt's Jahrbuch., clxxiv., p. 132.

‡Ebstein and Grützner. Pflüger's Archiv, vol. vi., p. 1, 1872. Hermann's Elements of Physiology, p 137, 1880.

¶Heidenhain, R. Archiv f. Physiol., xix., 2 u. 3, p. 148, 1879. Also, Breslau Arztl. Ztschr., i., 4, p. 22, 1879; also in Archiv f. Physiol., xviii., p. 169. 1878, and in Hermann's Handbuch der Physiol., V. der Absonder pv., 1879.

§Friedinger. Wiener Sitzungsber., October, 1871. See also Hermann's Elements of Physiol., loc. cit. Ebstein and Grützner, and Klemensiewicz confirm Heidenhain.

‖In a very recent article (reviewed in the Berliner klinischer Wochenschr.) upon the secretion of the acid of the gastric juice, it is stated again that H Cl is secreted in the pyloric end of the stomach. The statement is not sufficiently supported as yet.

applying the latter ligature half an ounce of coagulated egg-albumen, cut up into half a dozen pieces, was inserted in the fundus. A like amount was inserted in the pyloric portion, and the incision carefully closed with a continued suture. The stomach of this dog was nearly as large as that of a man, and the capacity of the pyloric and cardiac cavities was about as two to three. The dog recovered well, sat up, and moved around. He was given enough morphine to prevent his suffering pain. Six hours later he was killed, and the stomach opened. In the cardiac portion there had been absolutely no secretion of gastric juice. There was a little mucus on the surface. The reaction was neutral; the albumen was unchanged. In the pylorus there was considerable of the glairy secretion above referred to. The whole surface being carefully washed off, the fluid obtained was slightly acid. On testing it with alkali and copper in the usual way, a purple violet color, indicating peptone, appeared. The ligatures were found to be tight. That separating the cardiac from the pyloric portion was found to include a strip of the fundus from half an inch to an inch wide. A secretion from this part would explain the acid reaction. In large dogs the fundus and pyloric end are sharply marked off, the mucous membrane in the latter portion being thicker and without rugæ. The pieces of albumen were very slightly affected, the sharp edges being eaten off. The shock of the operation, which, owing to an accident, was unusually long, and the presence of the ligatures, had evidently almost entirely arrested secretion. But there was a moderate amount in the pylorus, and, as it seems to me, the fluid was of the same character as that obtained by Heidenhain.

In conclusion, we may consider it established that the fundus glands secrete an acid peptic juice and the pyloric glands an alkaline peptic juice. The latter probably has also some lubricating function. The special function of the "chief" and "border cells" in producing pepsin and acid respectively cannot be laid down so positively.*—Dr. C. L. Dana, in *Boston Medical and Surgical Journal.*

VALUE OF PEPTONES AND OF PANCREATIC EXTRACTS.—I performed one series of experiments to test the comparative absorbability of peptones and beef tea in the stomach.

Pepsin and trypsin under proper conditions turn albuminous bodies into peptone. The transformation is not, however, a direct one. The proteids are first turned into closely allied bodies which have received various names (parapeptone, of Brücke, anti-and hemi-albuminose of Kuhne, propeptone, parapeptone, etc.) It is sufficient for my purpose to say that after the albumen is changed, and before it becomes peptone, it is on cooling precipitable with alcohol. We may speak, therefore, of "the precipitable products of digestion."† We shall refer to these again later on.

Peptone itself is now agreed to be a hydrate of albumen.‡ It can be turned back into an albuminous body by dehydrating agents and prolonged drying.¶ It is chiefly distinguished by its being, as compared with albuminous bodies generally, quite diffusible (Funke). Upon this fact, as has been supposed, depends its importance as a digestive product.

As to peptone being absorbable and nutritive there can be no doubt. Catillon§ has shown that the administration of peptone alone may increase the weight and the excretion of urea, and this whether the substance be given by mouth or by rectum. Adamkiewicz,‖ Chapoteaut,* Defresne,† Raymond,‡ Bergeron,¶ Fowler,§ have contributed evidence as to the value of peptones. Their relative value is even definitely given. Chapoteaut makes a "conserve de peptone," of which he estimates that one drachm is equal to five drachms of beef. Sanders‖ estimates that one part of flesh peptone is equal to three parts of beef, and one part of bread peptone to three parts of white bread.

So much in favor of the peptones.

On the other hand, some observers** have not found the good results described by those just mentioned, who by the way are, many of them, personally interested in the manufacture of the substances they recommend. Again, there is a practical objection to almost all, if not all, genuine peptones, in that their taste is disagreeable.

Finally, it is a question whether they are very much more absorbable and nutritive than ordinary beef-preparations or scraped lean and raw beef. For Adamkiewicz†† has recently asserted that the diffusibility of a proteid is no measure of its absorbability in the body; and that the "precipitable products of digestion," referred to above, are very easily absorbable, though not at all diffusible.

I made some experiments to test, if possible, the relative absorbability of peptones and beef extract so-called. Schmidt-Mulheim‡‡ has shown that peptones are rapidly absorbed or carried off in the stomach of dogs.

Experiment. Two dogs, therefore, weighing twenty pounds, were taken, and food kept from them for twenty-four hours. Gave No. 1 of beef-peptone (Gant's) two ounces; gave No. 2 of beef-essence two ounces. The preparations were both of about the same consistency.

One hour and forty minutes later both were killed by drowning, and the stomachs examined. No distinct evidence of either beef-essence or peptone could be found in the stomach or intestine. The animals had swallowed some water, and the stomachs contained several ounces of a slightly yellowish fluid, which had no smell or taste of beef. So far as it went the experiment tended to show that the beef-essence was absorbed just as rapidly as the peptone in a healthy stomach. The facts of rectal absorption and of the absorbability of non-diffusible proteids lead to the view that peptones, if more valuable than beef preparations, are so only because they may contain more nitrogenous matter.¶¶

A few experiments have been performed to test the value of pancreatic extracts. Although Roberts has called attention to the possible value of such a preparation, there has been until lately no good sample in the American market, so far as I can learn. And the pancreatic ferments have hardly been used at all medicinally in this country. Re-

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*It may be added that the secretion of Brüner's glands has been found to have peptic properties. As these glands are very similar in structure to those near the pylorus a similarity of function may also be inferred.

†Adamkiewicz. Virchow's Archiv, lxxv., 1, p. 144, 1879.

‡Kossel, and Hoppe-Seyler. Schmidt's Jahrbuch., clxxii., p. 231.

¶Heninger, A. Comptes Rendu, lxxxvi., 23, p. 1464, Juin 10. 1876.

Hofmeister, F. Prag med. Wochenschr., iii., 27, p. 271, Juli 3, 1878.

§Catillon, A. Bull. de Therap., xcviii., 3, p. 116, 4, p. 169, February 15, 29, 1880.

‖Adamkiewicz, A. Die Natur u. der Nahrwerth des Peptones. Berlin, 1879. Berlin klin. Wochenschr., No. 2, 1878.

*Chapoteaut, P. L'Union, 74, p. 947, Juin 12, 1880. Also Clinical Studies of the Peptones. Paris, 1881.

†Defresne, Th. Bull. de Ther., xcix., 1, p. 22, 1881, and Ibid., 6, p. 221, 1881.

‡Raymond. L'Union, 24, p. 319, 1880.

¶Bergeron, P. J. Gaz. des Hôp., 65, p. 515. 1880.

§Fowler, G. B. N. Y. Medical Journal, vol. xxix., p. 561.

‖Sanders, H. (Amsterdam). Die Bedeutung der Verdauung für die Ernahrung, etc., S. L. E. a 8, 248 S.

**See Jour. de Therap., viii., p. 164. 1881.

††Vide loc. cit. Also J. Munk Physiol. des Menschen u. Sangethier, p. 169, 1881. Berlin.

‡‡Schmidt-Mulheim, A., Archiv für Anat. u. Phys. (physiol. Abtheil'), 1879, p. 39.

¶¶In estimating the value of the various beef and beef peptone preparations, it should be remembered that a healthy adult requires about four ounces of albuminous matter alone per day. There is nearly this amount in a pound of beef. The nutritive constituents of a pound of beef, there ore, cannot be gotten into much less than thirty teaspoons. The absurdity of the claims made for some beef preparations for example, "one teaspoonful represents the nutritive properties of a pound of beef," etc., is therefore apparent.

cently, however, a very active preparation containing the three (or four) ferments of the pancreas has been furnished by Messrs. Fairchild & Co., of this city. It will peptonize milk to a considerable extent or entirely within an hour. Another American preparation has been found by Mr. Moriarta to be active.*

The question is, however, whether trypsin or the pancreatic diastase will be of any avail when given by the mouth. It has been very conclusively shown (Ewald,† Langley,‡ Kuhne, Mays,¶ Mourrut, Defresne§) that the gastric juice under ordinary circumstances digests the pancreatic ferments. Langley brings forward strong evidence to show that each digestive ferment is destroyed in the section of the alimentary tract below where it is secreted. This destruction takes place also within from a few minutes (Langley) to one (Ewald) or in some cases two (Defresne) hours, depending on the amount of ferment and the acidity of the juice.

There is, however, this hope: Defresne and others assert that gastric juice, made acid with organic acids,‖ has a much less feeble destructive power, and only suspends the activity of the pancreatic ferments.

Now this experimenter, as well as Richet, and, I believe, some other physiologists, contend that hydrochloric acid is secreted chiefly or entirely in the first part of digestion. If, therefore, the pancreatic ferments be given some time after a meal, "guarded," perhaps, as Roberts suggests, with bicarbonate of soda, their activity will not be destroyed.

But, on the other hand, there is very strong evidence that in reality the organic acids are secreted first, and that hydrochloric acid does not appear for nearly an hour after the ingestion of food. At the best the pancreas ferments must be given with uncertainty, therefore.

Besides, it should be remembered that the stomach is the great organ for digesting proteids, and the attempt to throw any great load upon the pancreas is but a makeshift. According to Bechamp's** experiments trypsin is less powerful than pepsin, and others have confirmed his opinion. When very large amounts of vegetable diastase are given, as in the malt extracts, it is possible that some passes into the intestine undestroyed.

In conclusion, I would say that peptones are valuable, but more because they contain much nutriment than because they are very absorbable. They increase metabolism.

Pancreatic extracts have not been proved to be of value when given medicinally, and they are probably destroyed in the stomach. They may be of much use, however, in partially peptonizing foods before such foods are used.—Dr. C. L. Dana, in *Boston Medical and Surgical Journal.*

*Mr. D. C. Moriarta suggests in New Remedies, May, 1882, the following as a standard test of the proteolytic power of pancreatic extracts: Mix five grains of the pancreatin with twenty grains of bicarbonate of soda and four ounces of water; add to this mixture one pint of milk previously warmed to 140° F., and set aside two hours in a warm place. If the milk is completely peptonized, so that acetic and nitric acids do not produce precipitates, the pancreatin may be considered of standard strength—in absence of official standard. If five grains is found insufficient, a larger quantity may be taken in a second experiment; or, rather, to save time, several experiments may be made at the same time with five, ten, twenty-five, and fifty or one hundred grains of the pancreatin.

†Ewald, C. A. Vide op. cit. Appendix.

‡Langley, J. N. J. N. Journ. of Phys., January, 1882.

¶Mays, K. Untersuch. a. d. physiolog. Inst. d. Universt. Heidel., 3. 378.

§Defresne, Th. Etudes Experimental. sur la Digestion. Paris, 1880. Baillière et Fils.

‖See in support of this view: Von den Velden, R. (Strasbourg), Ztschrt. f. Physiol. Chem., iii., 3, p. 205. Also Deutsches Archiv f. klin. Medic., xxv., 1, p. 105, 1879. Uffelmann, J. Deutsches Archiv f. klin. Medicin., xxvi., 5 u. 6, p. 431, 1880. Fleischer. R. (Erlangen), Jahresbericht. d. Gesellsch. f. Natur u. Heilkun, in Dresden. p. 77, 1881.

**Bechamp, A. Comptes Rendus, xcii., 3, p. 142, 1881.

THE OPIUM HABIT.—In the New York Sun of September 16, there appears a somewhat sensational article called "One Way to Intoxication," in which the writer described the growing prevalence of the opium habit. As this has found its way pretty generally among the various journals, we venture to make a few editorial comments upon it. While the fact—and a very deplorable one it is, too—cannot be disputed, that the habit of using opium is steadily increasing, still we are hardly prepared to accept the statement as laid down in the article referred to. A great deal of blame for this habit can very justly be referred to those, who in their desire to prevent intoxication, have introduced laws prohibiting the sale of liquors. We find from the information accumulated by the Michigan State Board of Health that the consumption of opium is greatest in those States where the strongest prohibition laws are in force. Some powerful stimulant appears to be a necessary adjunct to man's existence. Go where you will, it is sure to follow you. The American has his whiskey, the Frenchman his absinthe, the German his beer, and so on through the endless number of alcoholic and narcotic substances. It is impossible to deprive a human being of his stimulant, for if you remove one, another—often worse—takes its place. So strict are some of the recent pharmacy laws, that in several of the States it is forbidden, except under particular conditions, to the pharmacist to dispense liquors, even on the physician's prescription. And what is the advantage of these stringent laws? Do they prevent or stop intoxication? No. Often the result is, that in order to satisfy the cravings of the drinker's appetite, he resorts to morphine. The opium habit is taken up—a step—the fatal one—is made from the frying pan into the fire. The hypodermic syringe becomes a pocket companion, first used, it may be, as a gentle stimulant, to soothe some annoying headache or to allay some wearisome pain,—once commenced, the practice becomes daily, frequently oftener. The result is inevitable, and ends in total ruin. The gifted English artist, Dante Gabriel Rosetti, whose premature death so recently deprived the pre-Raphaelites of their greatest leader, was due to the morphine habit, began in the hope of preventing sleeplessness.

Ought not the laws to be equally as well directed to that insidious stimulant, opium, as well as to the less objectionable intoxicants?—*The American Pharmacist.*

PSORIASIS INVETERATA TREATED BY BURDOCK SEED—DIPHTHERIA TREATED BY CALOMEL.—The writer has for many years known that his valued friend, Dr. W. C. Reiter, of No. 328 Penn avenue, Pittsburgh, Pa., had suffered from inherited psoriasis, and had accidentally met with a very simple plan of treatment which had relieved him in more than one recurrence of the disease. He has also known that Dr. Reiter as an excellent general practitioner, with a large practice, has been successful in relieving a number of cases similar to his own by the same plan of treatment, and that this treatment was so simple and easy as to be within easy reach of every physician in the United States, without recourse to the druggist or pharmacist, or to anything except the common burdock weed which grows at his door. It was also known that Dr. Reiter would only be too glad to tell all he knew for the benefit of his brother physicians and their suffering patients. But his treatment was so simple, not needing even a fluid extract, that there was danger that if published in these days it would pass as an unscientific vagary, or a small thing. It may therefore be useful to assume, on behalf of Dr. Reiter, the character of the servants of Naaman, and say to the readers of this pamphlet: "If the prophet had bid thee do some great thing wouldst thou not have done it?"

The following account was sent by Dr. Reiter some time ago, but not with any view to its publication. Lately, however, his permission has been asked for and obtained for its publication, and the readers are congratulated on the agreeable contrast between his style and anything they are used to find here. Hence his pleasant letter is given just as it was received from him, with the omission only of proper names.

DR. REITER'S LETTER.

LAPPA MAJOR.

Radix bardanæ, P. G.—Bardane, Fr.—Burdock, E.—Klettenwurzel, G.—Nat. Ord. Compositæ. Cynareæ.

Heads discoid, homogamous; involucre globous, the scales imbrecated and hooked at the extremity; receptacle bristly; pappus bristly, scabrous, caducous, (2) Coarse. European herbs. Leaves alternate, large. Lappa Major, Gaert.

Leaves cordate, unarmed, petioled. Common in waste and uncultivated grounds and fields in the New England, Middle and Western States. Each plant is a large, conical ill-scented and coarse-looking mass of vegetation, surmounted by a branching irregular panicle of ovoid heads, with tubular corollas of an exceedingly delicate pink color. The leaves are very large, with waxy edges. It has a wonderful design for the dispersion of its seeds. The scales of the involucre all end in a minute, firm hook, which seizes hold of everything that passes by.

The root has long been used as a medicine, particularly in Germany; and alterative, diuretic and diaphoretic properties were ascribed to it. It was prescribed for invalids suffering with rheumatism, skin and other chronic diseases, in powder, infusion, decoction, syrups, etc., —but never attained a greater popularity than mint, chamomile, balm and other remedies which the good housewife stores in her medical armamentarium.

It was my misfortune to inherit, from my father, Psoriasis Inveterata, which he told me he had inherited from a long line of progenitors. In youth I had spots on my skin foretelling what adult age developed—psoriasis on left leg and ankle—the same place on my body perfectly imitating my father's plague. He was never healed, although he sought medical advice in Europe.

I was a country doctor, and carried a cane on horseback to relieve the agonizing itching of my leg in warm weather. One warm afternoon (about 1840, I think), I was going to visit a patient with an old farmer, when he exclaimed, "What makes you tear your leg so furiously with the end of that hickory stick?" I replied, "To relieve the maddening itch of my accursed tetter." He said I must cure it; told me he had been afflicted with it on his hands so severely that he had lost his nails. He said I should gather burdock seed and put whisky on it, and take internally. I obeyed; put quite a quantity into gallon bottles and added whisky, of which I had but little; in the others I put alcohol, and stood them in a warm place. After some weeks I began to take a tablespoonful thrice daily, using that steeped in whisky first.

After taking all the whisky tincture I found slight improvement in tetter, but a vast power had been bestowed on my stomach. All my life I had to deny myself many things or suffer; now I could eat sauerkraut, turnips, mince pie, etc., etc., and only knew I had a stomach from that singular delight we all feel in satisfying a keen appetite with luscious food.

I now began to take alcoholic tincture and found an entirely different preparation. I had to add water, and discovered resin, and at the bottom of each bottle, oil; here was a hint. I put alcohol on the seed which had been macerated in whisky and obtained a resinous tincture. When my old friend and benefactor prepared his tincture, whisky was distilled in copper stills and came off as proof spirits; my whisky was manufactured by steam. My disease improved rapidly and ceased to torture me, although the skin remained dry and furfuraceous.

On the advent of summer I observed in washing my hands (a doctor must do that often) a great increase in sebaceous secretion, which required much soap to remove; now my whole cutaneous surface acquired a condition of the most perfect health. Whilst afflicted with tetter I had learned to eschew hog meat—a meal of sausages or ham was always very aggravating—I became a very sincere and faithful Jew in avoiding swine meat or fat as a diet For almost forty years I had a healthy skin; but my European tour in 1875 restored my old malady in an aggravated form. Their water, in many of the southern parts full of dolomite, both for drinking and washing, may have contributed; but sandwiches of cold ham and Bologna sausages were the chief enemies. On my return I could not get the tincture, and, when obtained, its effects were not as before. The taste was not a pure, agreeable bitter, but nauseous. Whether this was owing to mould on the seed or to the druggist having ground them, or to the climate I could not tell; Mr. Holland said he had bought the seed in New York.

A pupil of mine, Dr. Clark, took my place (in Mount Pleasant, Westmoreland county, Pa.) when I came to Pittsburgh. He was so kind as to have quite a lot of seed gathered for me; I prepared the tincture myself and am now perfectly well. I felt that it restored a perfect digestive power which my stomach lack d, and hence have prescribed it in atonic dyspepsia with such success that Mr. Holland can with difficulty supply the demand; the crop last summer was impaired so much by drought that he was compelled to order the seed from several western States, and still believes he will run short before the new seed can be gathered. I send to you some of the oil obtained from the bottom of a tincture bottle; some resin I found on a board last fall under a bushel percolator, from which I thought dripping had ended; I send two kinds of tincture, one obtained from contused, the other from whole seed. It can be made in a few days by heating alcohol and keeping warm; the cold preparation is very tedious; much alcohol is lost, the seed absorbing it. We have lost much resin, which clung to percolator and seed; we now save that by washing seed with warm alcohol, which we use for our fresh seed. The therapeutical action I could best reduce to form by calling it an alterative stomachic; it appears to improve all the nutritive, secretive and assimilative functions. I prescribe from two to four drachms, well watered, a half hour before each meal.

I have for a long time wished to send to you something on this Bardanas seed, but am lazy. A suffering illness has admonished me to do so before I die, and I am doing it before I can leave my room. You are the proper person to introduce a remedy and promulgate one of the most valuable therapeutic agents in my armamentarium medicorum.

By the way, did I send you my little monograph on diphtheria? If not, I will send one right away. I have, this winter, verified my discovery perfectly, Diphtheria is a functional disease of the liver. This organ has lost its power of destroying fibrine, of which Brown-Sequard says: "The liver, in a healthy adult, metamorphoses eighty ounces in twenty-four hours." Here you have the remote cause—inspissated blood—and the theses of infection, contagion, micrococci, etc., are moonshine, transcendental tomfoolery. The proximate cause —too much fibrine in blood. Where a case has not reached a fatal condition, from 24 to 40 hours' medication effects a cure. Hear and ponder this: A few weeks ago Dr. Joseph D———, Jr., lost a fine boy of five or six years with diphtheria. The second son took it, and meeting him one morning

on the street, I stopped to inquire about his son. He said "they thought him better." Dr. McC——— was with him, and said to me: "I was going for you to visit and treat my son Jim. He was out and apparently well yesterday, and became suddenly and alarmingly ill early last night; his pain in head is alarming; has but little exudation in his throat."

The patient Jim is a very bright boy of eight years, and much attached to me. I said to him, "Jim, how are you?" Placing one hand on vertex and other to forehead he exclaimed, "Oh, Doctor! I have such pain through my head." His throat had that intense erythematous redness which is pathognomonic of diphtheria; a few spots, like milk-stain, were the only exude. His skin was very pale and very hot, and his pulse very tense and quick, frequency not over a hundred.

I pronounced it a very grave case, gave him one scruple of calomel on a teaspoonful of cold water, and prescribed ten grains to be taken every hour. I ordered five grs. potass. chlorat. in solution every third hour. Gum-water, barley gruel, lemonade and cold water *ad libitum*. My visit had been at 9 A. M.; saw him again at 1 P. M. and 4 P. M., but found no improvement. I live in the country, seven miles east of city, on Pennsylvania Railroad, and came to city at 8 P. M. to see Jim. His father and Dr. A——— said he had improved. I could not discern it. Begged the mother to continue ten grs. every hour until I came again. She did, faithfully. I saw him at 8 A. M., and said: "Jim, how are you?" He sprung up on his rump and exclaimed: "Doctor, make mother dress me; I am well and want to go down stairs." After midnight he had begun to sleep peacefully, skin became cool, pulse softened and became full, bowels moved three times copiously, voided urine freely, and said his headache had gone. The interval was increased to three hours, but calomel was continued until dejections were watery, with green gelatinous masses like fresh-water polyps.

Dear Squibb, smoke that in your meditative pipe—a boy of eight years, with a half ounce of calomel in his prima viæ, not prostrated, but restored. Trousseau is the only medical writer I know of who has not only seen, but has most accurately and graphically described all the protean forms of this most fatal malady—and not one of them escapes a clear and most rational explanation by my etiology.

I have read again and again his most graphic articles on diphtheria, and it pains me to observe how he staggers in trying to reduce his notions to a rational philosophy, lacking the light of a sound etiology. Do borrow Trousseau's Clinical Medicine, Vol. ii., and read it. I know it will not only instruct, but delight you. I must here say—my cases have been hundreds—never saw hypercatharsis—have had to give salines—never saw salivation nor other mal effect.

Latterly, now and again, one of our younger medical men, disheartened from failure, will dare to try my treatment and "be born again;" and they become bold defenders of the faith; some will half try it in small doses, at long intervals, and say it is a deception; never suspecting the damning lie in their own minds and hearts. I met a fellow once at the bedside of a dying boy of seventeen years, who told me he had even given my medicine—and a scruple dose of it. I said, "When?" He replied, "About an hour ago." I told him he should have spared the calomel and made a rational prescription. He asked "What?" I told him, "A shroud and coffin." I am wearied by the conflict I have had with stupidity, bigotry, mulishness, vain conceit, etc., these many years. Should I take a trip to recuperate, when I get well enough, would you, or could you, find a few medical men of the "Scholar Class," humble, earnest workers, who would lend an attentive ear to my story? I want my profession to wipe this opprobrium medicorum from our glorious old escutcheon.

I forgot to tell you that when my old farmer friend, Mr. T——— told me about losing his finger nails, I was incredulous, and tolerated the license permitted the ignorant and poets in hyperbole—my last attack has vindicated the good old man's veracity. I can show you the nails on both of my thumbs, now almost restored to pristine perfection, but two years ago they were hideous in their malformation and ruin. The disease established itself at the matrix, and the progeny was a fearful monstrosity, all its surface was what Ovid vividly calls or describes as "disjecta membra."

The specimens which accompanied Dr. Reiter's letter were, first, a tincture made from the unbroken seed; next, a tincture made by his pharmacist from the ground seed; next, a portion of oil; and finally, a portion of resin.

The oil is a bland fixed oil, and from a casual examination it may be said to be like all the fixed oils from similar seed—without medicinal value. And the same is probably true of the tasteless insoluble resin. The effective part is doubtless that extracted by diluted alcohol. The tincture made from the ground seed is stronger in bitterness than that from the unbroken seed, as might be expected, even when the digestion of unbroken seed has been very long continued. For the doses recommended by Dr. Reiter, namely, a tablespoonful thrice daily, immediately after meals, a tincture should be made about as follows:

Take two pounds of the fresh burdock seed and grind it in a good sharp coffee-mill, putting it through several times with the mill screwed up as closely as possible, until the seed is well broken up, though it need not be in very fine powder, for it is the bruising or contusing effect of the mill teeth that is needed. Put equal parts of the ground seed in two one-gallon botties, and fill them up with good whisky not less than two years old. These should stand in a warm place, with occasional shaking, for a couple of weeks, when the clear tincture will be ready for use. In an alcoholic preparation like this, which is to exert a prominent effect on the stomach, good whisky, if old enough, is very much better than a diluted alcohol of the same alcoholic strength. If to be taken in doses of one or two teaspoonfuls or less, as with tinctures in general, the alcohol is as good or better than whisky would be for several reasons. But when the dose exceeds two teaspoonfuls the menstruum becomes an important therapeutic element, and then good, natural whisky or brandy of sufficient age should alone be used. Of course, it is possible for a manufacturer to make such a preparation as this, but there is not the slightest reason for his doing so. Any good pharmacist or any physician can make it best for himself, and should do so if it is to have a fair trial, for he can then control all the conditions necessary, as, for instance, the having the seed of the right plant, having it fresh, having the proper menstruum, and having it perfectly managed. Any one, therefore, who wishes to try Dr. Reiter's treatment should follow his directions and example in preparing the remedy for himself, or at least having it prepared immediately under his own eye; and in an inveterate disease like this, so simple a plan of treatment is certainly well worth trying upon so good an authority as Dr. Reiter.

Dr. Reiter has aimed at getting a saturated tincture, and has used the fresh seed unbroken. But it has often been shown on other similar seeds that they should be broken or crushed, and that when crushed a smaller proportion was needed. It is hardly doubtful that the above given proportion of two ounces of crushed seed to the pint will give as strong a tincture as six ounces of unbroken seed to the pint would give.

The maximum dose of Dr. R., as above stated,

is four fluidrachms, well diluted, three times a day, immediately after meals, to be continued for months if necessary, if the disease does not yield sooner; and improvement and restoration may be expected earlier in warm weather than in cold, according to the experience of Dr. R. Relapses are not frequent, and are confined to persons who are gross feeders.

In cases of atonic dyspepsia, without cutaneous eruption, he also finds it useful, but here never prescribes more than a dessert-spoonful, and that before meals, well diluted.—*Squibb's Ephemeris.*

MODERN THERAPEUTICS.—At the end of a recently published surgical paper occurs this sentence:

"I submit these cases for what they are worth, feeling that any plan of treatment which claims to help us out of the desperate straits in which septic accidents place us, is deserving of a hearing."

The paper gives the details of five cases, one of which terminated fatally; and in two others, at least, the author of the paper says: "The relation in these latter cases, between the use of the acid and the fall of temperature, is not as evident as it might be." Three other cases are mentioned in these words: "With the exception of one case of puerperal septicæmia, one of erythematous erysipelas, and one of lymphangitis, all were successful in result." Of these eight cases, four were unsuccessful, and at least two were doubtful, although the author's way of expressing this is, that with these exceptions—six out of eight—"all were successful in result."

The treatment used was a somewhat recently imported novelty, or rather a new and very superficial plausibility, based upon old and doubtful ground. Many, if not most, of the statements made in regard to this novelty are in themselves as irrational and as absurd as any of either domestic or foreign origin since the time of Broussais.

The above mentioned paper was read at a meeting of prominent surgeons, and it and the treatment were discussed, and on the whole the treatment received no support that would be very satisfactory to the author of it. But the remarkable feature of the discussion was, that so far as the published account of it goes, no allusion whatever was made to the irrationality, absurdity and inconsistency of the grounds and statements upon which the treatment was based and was tried. Tacitly, at least, and by fair inference, it seemed to be admitted that there is little or no principle underlying treatment of pathological conditions hitherto difficult to manage, but that "any plan * * * which claims to help us * * * is deserving of a hearing."

Throughout the paper and the discussion it is easy to see that this particular absurdity was accepted with distrust, and "damned with faint praise;" but the wonder still is that a high degree of professional intelligence and reason should ever have permitted it to be accepted at all, and this leads directly to the moral involved in all such medical history.

In the light of such action as this, which is constantly repeated, the medical profession cannot justly condemn the less intelligent laity for empirically trying all the quackeries that are proposed to them. Such an irrational "plan of treatment" as this, presented in such a way, is to the profession an almost exact analogue to "Pond's Extract" to the laity. Both claim to be effective for good, and although there is but little reason or intelligent support for either, still let them be tried lest something useful should escape by being irrational.

Whether it be a variety of turpentine that only one man knows, or a carbolic acid that only one man makes, or water from witch hazel twigs that only one man can distill, the principle or want of rational principle is the same, and the inconsistencies are the same. If the profession weakly lends itself to try every plausible novelty that may be presented to it without first inquiring closely whether its pretensions be rational or not, or be supported by the known relations between cause and effect, then it cannot justly blame the people for persistently trying one so-called system of medicine after another, and one patent medicine after another throughout the long list of hurtful, popular errors. Neither can the profession hope to make progress in its battle for life against such error from so weak a position.

At a Grecian council of war, upon the demoralization of the Greek leaders, held after Troy had been unsuccessfully besieged for seven years, Ulysses is represented to have said to Agamemnon—

> "And 'tis this fever that keeps Troy on foot,
> Not her own sinews. To end a tale of length,
> Troy in our weakness stands, not in her strength."
>
> —*Squibb's Ephemeris.*

PEPSIN.—M. Gautier has shown that sheep pepsin, well prepared, contains about two per cent. of its weight of insoluble granules, which can be collected and washed on filters of porous porcelain, and appear then to consist of refracting corpuscles rounded or ovoid in shape. In spite of their insolubility these corpuscles seem to possess considerable digestive power, since they can peptonise albuminous bodies, and if left for a long time in pure water, or in water which is slightly acidulated, the substance of which they consist becomes slowly transformed into a soluble pepsin. Does this transformation occur by a simple chemical process analogous to the hydration of starch in superheated water, or are these granules minute organisms, as M. Béchamp thinks, the function of which is to secrete the pepsin? M. Gautier inclines to the former view, believing that the granulations, constitute a chemical ferment, an insoluble pepsine, without life or organization, from which pepsin is formed in the presence of water by a purely chemical reaction. They contain a nitrogenous acid, free from sulphur and phosphorus, which resembles fatty acids in being soluble in ether and crystallizable. The evidence against their organized nature is that the highest magnifying power reveals in them no organized structure, and they undergo no multiplication in sterilized culture liquids. They digest albuminoid substances in the presence of the most powerful poisons, such as prussic acid, which destroys entirely the activity of organized ferments. The activity of the granules is only manifested in an acid liquid, which is a characteristic diametrically opposed to that of bacteria and their germs, which are active only in alkaline or neutral solutions.—*The Lancet.*

PATENT MEDICINES.—In the House of Commons on Friday evening, the 12th inst., on the order for going into supply, Mr. Warton called attention to the sale of patent medicines, especially those containing chloral and other dangerous ingredients, and recommended that the traffic should be placed under greater restrictions. He advocated—first, a label upon all patent medicines, indicating that the Government stamp was no guarantee of their quality; and next, a greater check upon the dispensing of poisons through the medium of such medicines. Dr. Farquharson concurred in the opinion that further protection for the public was required. Many accidents had taken place in consequence of the sale of poisons under the guise of patent medicines. Mr. Hibbert, on behalf of the Government, was not prepared to give a decided opinion as to the continuance of the present system of selling patent medicines, but the question was worthy of consideration. He agreed that it should be made clear that the Government stamp afforded no guarantee of genuineness, also that medicines containing poison should be so labeled. The subject then dropped.—*The Lancet*, May 20, 1882.

TREATMENT OF ANASARCA.—Before describing to you the methods I propose for treating œdema of the legs, I must state that it is not entirely original. It is simply a modification of that proposed and practiced by Southey. Having frequently seen unpleasant and sometimes disastrous results, or rather accompaniments, of Dr. Southey's draining canulas, I was induced to inquire into the causes of the irritation set up in the skin. It appears to me that there are two leading factors producing an irritation of the skin, resulting frequently either in simple erythema, erysipelas, or abscess. In the first place, in an œdematous limb the skin elements become compressed and their vitality is lowered by interference with their nutrition. This is well illustrated when an ulcer forms, cicatrization will not take place until the œdema be reduced, in other words, until nutrition is restored to the skin elements, when the sore usually heals kindly, only to break out again as the dropsy re-accumulates. The second factor appears to be the presence of an irritating body. This I conceive to be the dropsical fluid. If this fluid is tested it will be found to possess a weak alkaline reaction. Now it seems probable that any fluid possessing a positive reaction (either acid or alkaline) flowing over a skin that is badly nourished, and whose epithelium is put on the stretch, will be quite a sufficient irritation to cause untoward complications. Taking this view of the case it appeared to me that if by any means this fluid could be constantly kept neutral while it was draining away, one of our factors would be removed. Accordingly the following method was adopted: The limbs to be drained were sponged over with a solution of boracic acid. This being a mild, non-irritating acid, was judged to be sufficient to neutralize the serum. Several punctures were then made through the skin in an upward direction on a dependent aspect of the leg. Through these the dropsy drained freely. So far the experiment proved satisfactory, but only one of the conditions had been fulfilled. Something was required to keep the serum neutral, and also to prevent it wetting the patient and the bed. In order to meet both difficulties, moderately-sized Turkey sponges were thoroughly soaked in the saturated solution of boracic acid, squeezed dry, and applied over the punctures, and kept in position by a turn of bandage lightly applied. These sponges required to be removed in the course of two or three hours, and the accumulated serum squeezed out and again soaked and re-applied. In this manner a couple of pints or even more of serum could be drained off in the course of 24 hours. And in all the cases I tried there was not the slightest trace of irritation of the skin. Of course there is no method but which will have its disadvantages, and this is no exception to the rule. The attention required, although great, is not insurmountable. For any case in which this method would be admissible would want considerable nursing, and no extra labor would be involved by it. Perhaps the greatest disadvantage is that the punctures require to be repeated nearly every 24 hours. But this is not so painful as may be supposed, for the skin, by tension and loss of vitality, is rendered less sensitive. Indeed, as a matter of fact, the patients rarely object to the operation on that score, being only too glad to get rid of their dropsy. Another disadvantage is that in some exceptional cases only a drop or two of fluid follows the puncturing; the cause of this I am unable to state. Probably the serum contains too much albumen, or it may be, as Professor Spencer calls it, solid œdema. My most successful cases as regards draining were those in which the dropsy was due to cardiac insufficiency. Œdema due to Bright's disease as a rule did not drain so easily If by any means the neutralizing could be applied to Southey's canulas, an almost perfect system of drainage would be estab ished, but then one of our conditions would remain unfulfilled. The canulas would be a constant source of irritation. So that I fear we have still to look for the acme of drainage. The advantages of the proposed method are I think obvious enough. A reduction of irritation with, at least in the majority of cases, an efficient drainage, and this at a relatively small cost of labor. With regard to the advantage or disadvantage of external drainage I say nothing, except that I have found in many cases diuretics and purgatives useless until external drainage has been resorted to. And then, and not till then, they acted satisfactorily.—George Rothwell Adam, M. B. et Ch. M., Edin., in *The Australasian Medical Gazette*, Aug., 1881.

COUNTER-IRRITATION.—Of all therapeutic measures, there is probably no single one so universal, and so potent in its application, as counter-irritation. The disputed point, as to whether it produces its results through the agency of the nervous or the circulatory system, has no practical interest for the busy physician. He has but little time for theories or physiological experimentation, what he most desires are facts and results. In counter-irritation he has them both; it *can* cure, and it *does* cure. It matters but little in kind, but greatly in degree, what counter-irritant is used. When we desire a profound impression, as in the initial stage of sthenic pleurisy, nothing short of a fly blister, and a big one at that, one that will cover the whole affected side, will do any good. A mustard plaster, under such circumstances, will be like a child playing at war, as compared with real battle. Whereas, when we meet an asthenic type of the same disease in a weakly and debilitated individual, the violent fly blister would be too powerful, and resort must be had to the gentler mustard. Much undeserved odium has been cast upon counter-irritation, as upon many other therapeutic measures, because of inferiority in quality of the article used. We have used half an ounce of cantharidal collodion with the result of merely soiling the part to which it was applied, it did not even *redden* the skin, while half a drachm of a good article, applied to the same part, on the same person, blistered most terribly.

Many object to counter-irritation of a severe character, on the ground that it produces an external sore that is sometimes very hard to heal. That this is true no one can doubt. It does sometimes happen that very tedious and painful abrasions of the skin, or sores, do result from fly blisters or tincture of iodine, or some other equally powerful counter-irritant. But these are the exceptions, and ought not to militate against the rule which is, that this form of treatment is an exceedingly valuable one in nearly all affections of an inflammatory nature. A large volume could be written on the different counter irritants and the great value of counter-irritation, but it is not our purpose to do more than merely call your attention to the matter. Every physician must wisely judge what cases are suitable for this form of treatment and what articles are appropriate to the effect desired. But remember, that while it will be all very well to resort to internal medication, counter-irritation can do no serious harm, and it will oftentimes amazingly aid the action of your drugs.—*Medical and Surgical Reporter.*

BURNT ALUM IN AGUE.—Baboo Brojendra Nath Banerjee states that this is a very cheap, easily procurable, and efficient antiperiodic medicine. The value of alum is chiefly marked in cases of fever in which the attacks come on with clock work regularity. It generally fails in irregular types of intermittent fever. Two doses are generally sufficient to complete the cure. Eight grains of burnt alum are to be given in each dose. The first dose is to be given three hours and the next an hour before the expected attack of fever.—*Indian Medical Gazette*, January 2, 1882.

New Remedies.

MANGIFERA INDICA, OR MANGO.—The value of this as a therapeutic agent has in my hands proved of so great efficiency that I look upon it as a duty to make known its usefulness to the medical profession. So many new remedies have been introduced within a few years, and so many virtues ascribed to them, that it becomes a delicate subject for a physician to laud a new remedy, for fear that he may be classed as an empiricist. This, however, cannot be attributed to me when I tell you that I have no interest in the sale of the article further than the good it will do to suffering humanity, and the benefit the physician who prescribes it will derive. However, I take a certain amount of credit to myself for being the first to introduce it to the medical profession. An excellent description of the article is given in the Supplement to the American Dispensatory.

I have used this drug for upwards of ten years, and can assure that it has never disappointed me in its action. I have experimented with it largely, and have found it an astringent of peculiar power. This bark contains tannin, but it differs from tannic acid in that it will not cause constipation of the bowels. It can be given during active inflammation without the slightest danger. It can be used with great advantage in cholera, typhoid fever, cholera infantum, diarrhœa, and all diseases with liquid discharges from the bowels. My first experiment with this bark was in uterine inflammation and in ulceration of the cervix, by painting the ulcerated surface with the fluid extract (full strength), and using a weak solution as an injection. I have been enabled to overcome the most obstinate diseases of this nature. In gynæcological therapeutics the Mangifera is a most valuable agent. It lessens catamenial pain, cures leucorrhœal discharge, diminishes profuse menstrual menstrual evacuation and corrects disorders in general. In nasal catarrh a weak solution used with the spray atomizer is, by far, the best agent I have ever used. As an internal remedy for hemorrhage of the uterus, bowels or lungs, and also in muco-purulent discharges from either, I know of no agent equal to it.

In diphtheria this remedy has, perhaps, its largest therapeutic value. I apply it in the form of the fluid extract (full strength) to the fauces with a camel's hair brush, and use a weak solution of it as a gargle. I can honestly assure the medical profession that it has never disappointed me. I do not wish it to be understood that this agent alone will cure all cases of diphtheria, but I do assert that I know of no remedial agent in the whole materia medica that will meet the requirements as well as the mangifera indica.

As an antiseptic agent, internally or externally employed, it will prove of great value, as it is decidedly opposed to decomposition.

Prof. Howe says: "I have found the mangifera of marked service in the treatment of profuse and exhausting menstrual fluxes. In uterine hemorrhage following miscarriage, the agent exerts a powerfully restraining influence upon the hemorrhagic waste. In the sanguineous losses which often occur about the change of life, and when uterine tumors are developing, the mangifera is the most potent and reliable medicine ever introduced to the notice of the medical profession. I prescribe the fluid extract in five-drop doses every three or four hours. In a short time the influence of the medicine is observed, and in a few days the desired effect is realized. No remedial agent of so great value for the purpose named has been introduced to the profession; it is as near a specific for profuse menstruation and uterine hemorrhage as may be desired. I might report ten or twelve cases in which the medicine exerted just such an action as was wished."

Prof. Moss says of it: "I have tried the fluid extract of mangifera indica, and find it to be an astringent of superior power. There is a property in it not found in ordinary astringents. I had a case of chronic diarrhœa of long standing, attended with indigestion, debility, and much pain in the umbilicus. I suspected ulceration, and gave the patient hydrastis and bismuth, but only with partial relief. About this time I secured the mangifera indica, put the patient upon it, and cured the diarrhœa. I have waited for several weeks, and find the effect so far permanent. I am much pleased with it, and predict that it will prove a valuable acquisition to our list of astringents."

It has the following advantages over other astringents: The dose is small, easily taken, has no disagreeable taste, does not derange the stomach; hence, it is well adapted to infants and persons with fastidious stomachs. It is rapid in its action, and more certain in its effects than most other remedies.

For the benefit of humanity, I introduce this remedial agent to the medical profession, hoping that my brethren will try and prove its value from their own standpoint.—*Eclectic Medical Journal.*

EUONYMUS ATROPURPUREUS—WAHOO.—Through the solar hypogastric plexus of nerves, euonymus has three special actions, viz.: 1st, upon the liver, increasing the bile greatly; 2d, upon the digestive organs generally, and acting as a hydrogogue cathartic; 3d, upon the kidneys, increasing blood pressure, and, in over doses, producing albuminuria—Bright's disease. The action of euonymus upon the bowels and liver resembles that of mercury and podophyllum, but it does not leave the liver in a congested state like mercury, and it acts more powerfully upon the secretory cells of the liver than either the mercury or podophyllum. I have recently tested it thoroughly in quite a number of cases in my dispensary, and find that it most powerfully excites the flow of bile. In over doses it produces a sick, weak sensation, a dull, heavy pain in the forehead, sickness of the stomach, perspiration, heat in the face, alternated with chills and profuse diarrhœa, with nausea, tormina and cold sweats. In more moderate doses, it acts as a cathartic, acting at the same time upon the liver and pancreas, thus aiding secondary digestion. It stimulates the entire nutritive process, and for that reason is a valuable remedy in debility and emaciation in many diseases. Much of the fluid extract that has been sold has been made of the old dried root, and of the bark of the shrub; hence, almost worthless. I have a fluid extract from the most reliable firm, viz., Parke, Davis & Co., which is very strong. In that condition of the digestive organs, usually called "biliousness," I know of no remedy equal to euonymus, alternated with, or given with nux vomica. In cholera morbus and cholera infantum, with profuse bilious stools, and marked prostration, and nausea, the euonymus, in very small doses, acts promptly. In dyspepsia, where duodenal and stomachal debility both prevail, euonymus, with nux vomica or hydrastis, will be found to be a positive remedy. In small doses, say 1 to 2 gtts., three times a day, it is a valuable remedy in albuminuria, and may be alternated with helonias dioica. It is generally believed that indigestion and torpid action of the liver precede albuminuria, or Bright's disease, hence the utility of small doses of euonymus. One or two weeks administration of euonymin, or of the fluid ext. of euonymus, will generally cause the albumen to disappear from the urine. It has speedily relieved pains in the back, loins, hepatic and splenetic regions. It is one of our most trustworthy remedies for gall-stones.

It acts well in old chronic cases of intermittents, hence has acquired the appellation of "antiperiodic." Some writers have reported favorably of euonymus

in typhoid fever. It may regulate the functions of the liver, spleen, and bowels, and so tone up the system as to materially aid in eliminating the specific virus of this disease. Euonymin is a mild and certain cathartic, in moderate doses. Bartholow says that "its cathartic properties are similar to rhubarb, and is an excellent remedy in hepatic and intestinal disorders requiring such a remedy. Enonymus has more power over the pancreas and the gastric glands than any remedy I know of, and hence its value in all forms of indigestion. The euonymin may be given in doses of ¼ of a grain as a stimulant to the liver and pancreas, and Parke, Davis & Co.'s fluid extract in doses of 5 to 10 gtts. I have just read J. Milner Fothergill's little work, entitled "Indigestion and Biliousness," published by Bermingham & Co., of New York, in which Fothergill says: "Aloes is an agent long recognized as having an effect upon the liver; so is rhubarb."

Taraxacum is a reputed liver-stimulant, much in vogue with the world at large, and with herbalists. Jalap, colocynth, and senna, are also cholagogues of some potency. Ipecacuanha is a hepatic stimulant, not only of time-honored repute, but the observations of clinical medicine are borne out by physiological experimentalists. Rutherford found it to be one of the most potent of cholagogues in the form of a dinner pill. He says, further on "to the same class of hepatic stimulants belong Iridin, from the *Iris versicolor*, and still more popular in euonymin, derived from the bark (of the root) of euonymus atropurpureus, a drug now much used in the United States and in Great Britain. Hydrastin possesses similar properties, and so does juglandin, from the bark of the juglans cinerea. Baptisin, from the root of the wild indigo, also possesses a moderate stimulant action on the liver." He says: "Where a powerful cathartic is required as well as a stimulant to the liver, then podophyllum is required, being a cholagogue and cathartic of power." It is no longer necessary, then, to give mercury, as it is certainly demonstrated that we have several vegetable articles that act well on the liver, such as ipecauanha, hydrastis, euonymin, irisin, podophyllin and baptisin. And to these may be added nux vomica and sulphur. As the bowels are generally constipated in cases of inactivity of the liver, I have used a pill composed of some of the above remedies, the formula of which I have furnished Parke, Davis & Co., who make the pills and sugar coat them as cheap as I can purchase the medicines by retail; hence, I buy from them. This pill, composed as it is of cascara, nux vomica, hyoscyamus, podophyllin, juglandin, and the comp. ex. of colocynth, not only acts well upon the liver, but purges mildly, in doses of one to two pills, and freely, in doses of three to four pills. I have used the ex. of euonymus (fluid) in doses of fifteen to twenty gtts., with five gtts. of tincture of nux vomica, and thirty gtts. of tincture of hydrastis, three times a day, in those old cases of indigestion, with the very best effects. In phthisis pulmonalis, where the stomach and liver are out of working order, I give thirty gtts. each of the tincture of euonymus and ptelia, three times a day; to tone up the stomach, and restore the liver to a state of wonted activity. And I have found that they are followed soon by an improved state of both primary and secondary digestion. I am much pleased with the action of euonymus, and I think all practitioners will be, who try it fairly.—I. J. M. Goss, M. D., in *Am. Med. Journal.*

Mango as a Remedy.—The mango, *Mangifera Indica*, has recently been introduced into America as a therapeutic agent, in the form of fluid extract made either from the fruit or the rind. The Indians have long employed the leaves and petioles as masticatories to give tone to the gums, whilst the Hindoos use the rind in skin affections. A soft reddish-brown gum resin which hardens when kept and resembles bdellium is obtained by incising the rind of the mango. The resin is entirely soluble in alcohol, and partially so in water, forming a kind of milky emulsion: mastication softens it, when it sticks to the teeth and leaves a pleasant but slightly bitter taste. Mango also appears to be an astringent with a special tonic action upon the mucous membranes. Its effect is great in diphtheria and other malignant throat diseases, when the fluid extract is applied locally, as well as in the form of a gargle, in the proportion of 10 grammes of the extract to 125 grammes of water. —In hæmorrhages from the uterus, intestines and bronchi, and in muco-purulent discharges from the intestines and uterus, Dr. Linquist its introducer knows of no equal. The avantages of the remedy are that it can be given in a small dose; that it is easily taken as it has a pleasant taste; that it causes no derangement of the stomach; that it acts rapidly; and that it is more certain in its effects than other agents. The following formula is recommended as a serviceable one:

℞ Fl. ext. mangifera indica, 10 grammes
Distilled water, 120 grammes.

Mix without filtering. A teaspoonful every hour or two.—*Jour. de Med. de Paris.*

Fluid Extract Manaca.—Manaca is indicated when we have acute pains in the joints and muscles These pains are wandering, changing from the smaller to the larger joints, and in the muscular tissue of the back, shoulder and limbs, the patient never having any inflammation whatever. I have seen several cases of chronic rheumatism get relief in a few days and be permanently cured by a few weeks' perseverance, in the use of this remedy. Had one case of general anasarca, thought apocynum cannab. was indicated. The apocynum did but little good until manaca was given, when the patient, who was an old man—and whose father and brother had died of dropsy—was in a few weeks entirely cured. I have treated one case of uterine colic which had in addition the above symptoms, with manaca, and successfully. I have also treated several cases of dysmenorrhœa, successfully, having the above symptoms. I point this out, at least, as an indication for the use of this remedy. The dose of the fluid extract manaca I have used was 10 drops, in water, every four hours.—W. H. Halbert, M. D., in *Georgia Medical Journal.*

Society Proceedings.

The Detroit Academy of Medicine.

THE Detroit Academy of Medicine held its 13th annual meeting, October 24th, when the following officers for the ensuing year were unanimously elected:

President—Dr. Judson Bradley.
Vice-President—Dr. Hal. C. Wyman,
Secretary—Dr. A. B. Lyons.
Treasurer—Dr. Judson Bradley.

The retiring president, Dr. Bradley, read the annual address in which he reviewed the doings of the Academy and predicted greater success for it in the future, also giving a resumé of the progress of medicine and surgery during the past year.